One Sprint. Many Solutions.℠

User's Guide

PCS Connection Card™
Model: CF2031

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Welcome to Sprint

Only Sprint built the largest all-digital, all-PCS nationwide network with advanced multimedia services, reaching more than 230 million people for clarity you can see and hear.

When it comes to mobile connectivity, the PCS Connection Card™ offers more freedom than ever before. No wires, no cables, just access to your information when you need it. The power of the Internet and company data is truly at your fingertips.

This guide will familiarize you with our technology and your new PCS Connection Card and PCS Connection Manager℠ Software through simple, easy-to-follow instructions.

Thank you for choosing Sprint.

Introduction to this User's Guide

This User's Guide introduces you to all the features of your new PCS Connection Card™. It's divided into six sections:

- **Section 1:** PCS Connection Card Basics
- **Section 2:** Installing the PCS Connection Card
- **Section 3:** Using the PCS Connection Card
- **Section 4:** PCS Vision℠
- **Section 5:** Technical Specifications & Regulatory Information
- **Section 6:** Safety Information and Terms & Conditions

Throughout the guide, you'll find tips that highlight special shortcuts to help you make the most of your wireless network card and service. The Table of Contents and Index will help you locate specific information quickly.

You'll get the most out of your PCS Connection Card if you read each section. However, if you'd like to get right to a specific feature, simply navigate to that page. Follow the instructions and you'll be ready to use your card in no time.

Tip: You can print out this guide to keep on hand or view it online. If you're viewing it online, simply click on a topic in the Table of Contents or on any page reference within a section to go directly to that topic.

PCS Connection Card™ Basics

Introducing the PCS Connection Card™

In This Section

- Your PCS Connection Card
- A Network Card and a Phone
- Package Contents
- About this Guide

This section introduces the basic features and functions of your PCS Connection Card™, what is included with your card and how to use this guide to get you started.

Your PCS Connection Card

The PCS Connection Card model CF2031 fits into a Type II Compact Flash slot and, through the included adapter, a standard Type II PC Card slot, allowing it to work with most notebook and Pocket PCs. This versatile device functions as both a wireless network card and a mobile phone. The PCS Connection Card allows you to:

- Access your company network
- Send and receive email
- Access the Internet
- Make and receive voice calls
- Receive short text (Web) messages

all without the need of a network cable or phone line.

The PCS Connection Card functions in notebook PCs with these Windows® operating systems: 98SE, 2000, Me, and XP. Your PCS Connection Card is also supported by Pocket PC and Pocket PC 2002.

CDMA Networks

The PCS Connection Card operates over a type of wireless network called CDMA (Code Division Multiple Access). This network technology has many features beyond providing a wireless link, including Web Messaging, which allows you to receive short messages using the PCS Connection Card.

To use the PCS Connection Card, you need an account that gives you access to a CDMA network.

The PCS Connection Card utilizes CDMA technology enabling real-time wireless access to email, the Internet or your company network. The card runs on most current Windows-compatible laptop or desktop computers, and it provides data transmission of up to 144 kilobits per second (kbps) (average speed of 50-70 kbps before bandwidth optimization).

Tip: More information about CDMA networks is available on the CDMA Development Group Web site, www.cdg.org.

A Network Card and a Phone

During PCS Vision connections, the PCS Connection Card is a true network card, functioning just like the network cards familiar to most corporate computer users. Once installed and configured, the card connects instantly to the CDMA network with a few mouse clicks. You can just insert the card, click a few buttons, launch your Internet browser, and you're ready to surf the Web. To access your company network, you may need to launch an extranet client after you connect to the CDMA network.

Tip: To optimize your settings for faster speeds and conservation of data transmission when accessing your company network, work in "Offline" mode and synchronize periodically to send and receive company email. Also, save/drag-and-drop attachments to a desktop folder rather than double-clicking prior to opening. For more detailed information, access the Microsoft whitepaper at http://www.microsoft.com/office/outlook/evaluation/perform.doc.

You can also connect a headset to the PCS Connection Card and use it as a phone using the PCS Connection Manager Software's built in keypad.

Package Contents

Your PCS Connection Card package contains the following components:

- PCS Connection Card model CF2031
- Start Here Guide
- Installation CD containing the PCS Connection Manager℠ Software and a link to this User's Guide
- AC Adapter
- Battery Pack and LiIon battery for PCS Connection Card
- PC Card Adapter

About This Guide

This user guide is designed to provide you with all the information you need to install and use your PCS Connection Card.

- **Section 1** (which you are reading) gives you an overview of the card, providing the background information necessary to understand the following sections.
- **Section 2** provides step-by-step instructions on installing the PCS Connection Card.
- **Section 3** provides step-by-step instructions on using the card and the PCS Connection Manager℠ Software.
- **Section 4** provides an introduction to PCS Vision℠ Services.
- **Section 5** provides electrical, radio frequency, and other parameters of the PCS Connection Card for those who require technical information, as well as regulatory information.
- **Section 6** provides important liability and safety information and the Terms and Conditions of use for the PCS Connection Card.

Getting Started With Your PCS Connection Card™

In This Section

- **The PCS Connection Card Software**
- **Activating and Configuring Your Account**
- **Care and Maintenance**

This section outlines the basics of getting started with your PCS Connection Card™, including installing the PCS Connection Manager℠ Software and inserting and activating your card.

Getting Started

Before you can begin using the PCS Connection Card, you must:

1. Install the PCS Connection Manager Software.
2. Activate your PCS Account and configure the PCS Connection Card to use your account, unless the card has been pre-activated.

The PCS Connection Card Software

The PCS Connection Card comes with this software:

- PCS Connection Manager Software, which allows you to manage the PCS Connection Card and monitor your connections.
- The driver software that forms the interface between the PCS Connection Card and your Windows operating system

The software must be installed before you insert the PCS Connection Card for the first time. Detailed instructions are provided, starting on page 17 (for notebook PCs) and on page 27 (for Pocket PCs).

Activating and Using PCS Service

Before using your PCS Connection Card, you must first set up your PCS Connection Card wireless network account.

To set up your PCS Connection Card wireless network account:

Call PCS Customer Service Solutions.

- If you will be using your PCS Connection Card primarily for business purposes, call **1-877-789-3969**.
- If your card is intended primarily for personal use, call **1-888-715-4588**.

You should have the following information available:

- Your billing address
- Your Social Security or Tax ID number
- Your driver's license number
- Your PCS Connection Card's ESN (electronic serial number) The ESN is printed on the label on the back of the card and can also be displayed during the installation process.
- A pen and paper to write down your account information

During this call, PCS Customer Service Solutions will help you select your service plan and guide you through the activation process. They will also provide you with the following important account information:

- Your card's Activation Code
- Your card's Phone Number
- Your card's Lock Code

Tip: You can use the Lock Code feature to prevent others from using your account should your PCS Connection Card be stolen. See page 56 for instructions on using this feature.

Unless your card has been pre-activated, the PCS Connection Manager application will automatically detect that no account has been configured when you run it for the first time. The Sprint Activation Wizard will then launch to guide you through the activation and configuration process. For details on using the Activation Wizard, see page 24 (for notebook PCs) or page 38 (for Pocket PCs).

Care and Maintenance

As with any electronic device, the PCS Connection Card must be handled with care to ensure reliable operation. Follow these guidelines in using and storing the card:

- Do not apply adhesive labels to the card. This may cause the card to become jammed inside the card slot.
- Optimal signal strength is usually obtained when the antenna is perpendicular to the modem. The antenna should bend easily at the hinge. Do not forcefully bend the antenna.
- When storing or transporting your PC in a case (such as a notebook case), remove the PCS Connection Card and store it in a compartment where it cannot be crushed or broken.
- The card should fit easily into your computer's Type II Compact Flash slot or, with the PC Card Adapter, into your computer's Type II PC Card slot. Forcing the card into a slot may damage connector pins.
- When using the PCS Connection Card with a Pocket PC, the Battery Pack must be used to prevent fatal damage to the Pocket PC.
- Protect the card from liquids, dust, and excessive heat.
- When not installed in your computer, store the card in a safe place.

Installing the PCS Connection Card™

Installation on Notebook PCs

In This Section

- System Requirements
- Installing the PCS Connection Manager℠ Software
- Inserting and Removing the Card
- Configuring Your Account

This chapter guides you through the steps necessary to install your PCS Connection Card™ and make it operational on a notebook PC.

Getting Started

Before you can use your PCS Connection Card, you must first:

1. Install the PCS Connection Manager℠ Software, located on the Installation CD, onto your computer.

Note: Before installing your new software, delete or uninstall any previously existing modem or dialer software from your system.

Note: Do not insert the PCS Connection Card in the slot until prompted to do so by the installation wizard (varies by operating system).

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2. Insert the PCS Connection Card into your computer's PC Card slot. Windows will detect the device and automatically install the necessary drivers.
3. Launch the PCS Connection Manager Software application.
4. If your card has not previously been activated, the Activation Wizard will automatically launch and guide you through the process.

System Requirements

The PCS Connection Card is supported on the following operation systems:

- Windows 98SE
- Windows 2000
- Windows Me
- Windows XP (Home and Professional versions)

To install the PCS Connection Card, you require these system resources:

Table 1: System Resource Requirements

CPU	Pentium II (150 MHz or higher)
Card slots	Type II PC Card slot or Type II Compact Flash slot supporting 3.3V
Communications ports	1 available
Disk drive	CD-ROM
I/O resources	1 IRQ, 32 bytes I/O space
Memory	32 MB
Disk space	7 MB

Tip: A driver is software that forms the interface between a device (such as the PCS Connection Card) and your PC's operating system (such as Windows Me).

Special Note for Windows 98SE and 2000 Users: To function properly, the PCS Connection Card's IOTA protocol requires support for high-security 128-bit encryption. If the installer does not detect high-security support on your system, a pop-up window will appear instructing you to update your Internet Explorer to version 6 (Windows 98SE) or update your Windows 2000 to support 128-bit security (Windows 2000). Follow the onscreen instructions to update your system.

Installing the PCS Connection Manager℠ Software (Windows 98SE, Me, 2000 and XP)

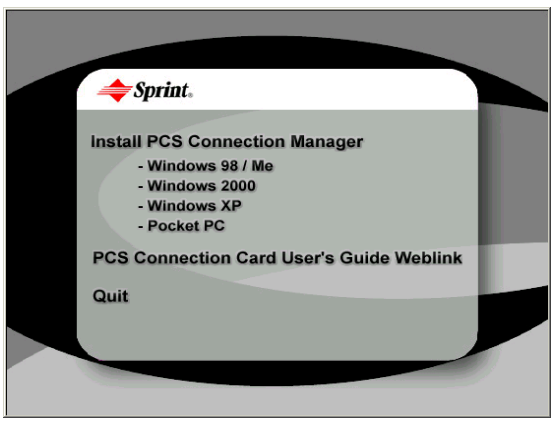
Follow the instructions below to install the PCS Connection Manager from the installation CD. This process requires you to restart your PC at the end of the installation; therefore, we recommend that you quit all other open applications before you begin installation. The PCS Connection Manager automatically determines your PC's operating system and installs all appropriate software modules.

Note - Windows 98SE: Users of Windows 98SE must ensure that Windows Dial-Up Networking and TCP/IP protocol are installed.

Note - Windows 2000 and XP: Users of Windows 2000 and XP must insert the card prior to installing the software. (See "Inserting and Removing the PCS Connection Card" on page 23.) Windows 2000 users must be logged in with administrative privileges. You may also require administrative with XP, depending on your XP installation.

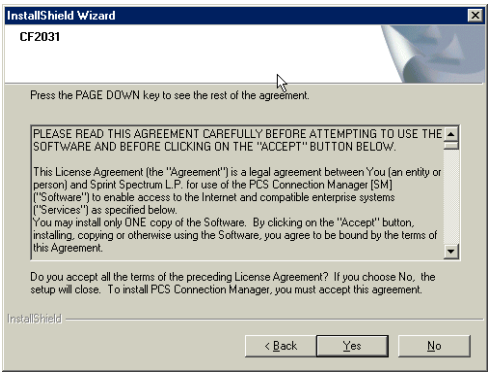
Installing the PCS Connection Manager Software and the PCS Connection Card driver:

1. If the PCS Connection Manager CD is not already in your CD-ROM drive, insert it. The CD should auto-start and display a menu.

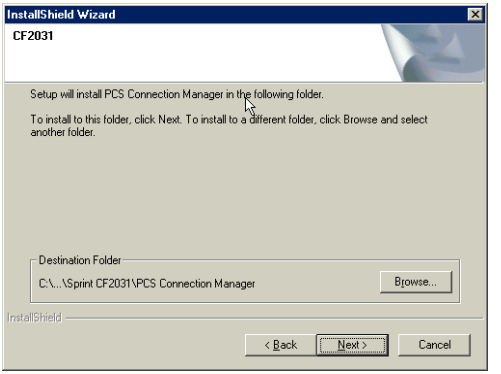


2. If the CD does not auto-start, select **Start > Run** and enter **d:\launch.exe** where **d** is the drive letter of your CD-ROM drive.

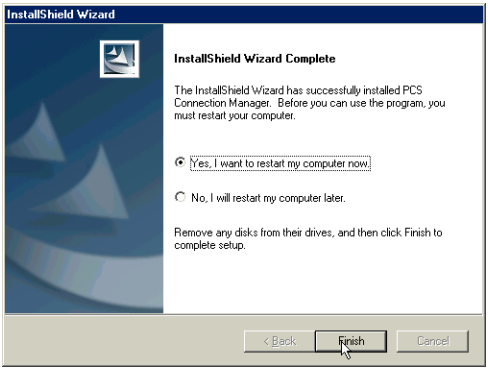
3. From the CD start-up window, select your Windows operating system. This will launch the InstallShield® Wizard.
4. The License Agreement window appears. Click **Yes** to accept the terms of the license agreement and proceed with the installation.


InstallShield Wizard
CF2031
Press the PAGE DOWN key to see the rest of the agreement.
PLEASE READ THIS AGREEMENT CAREFULLY BEFORE ATTEMPTING TO USE THE SOFTWARE AND BEFORE CLICKING ON THE "ACCEPT" BUTTON BELOW.
This License Agreement (the "Agreement") is a legal agreement between You (an entity or person) and Sprint Spectrum L.P. for use of the PCS Connection Manager [SM] ("Software") to enable access to the Internet and compatible enterprise systems ("Services") as specified below.
You may install only ONE copy of the Software. By clicking on the "Accept" button, installing, copying or otherwise using the Software, you agree to be bound by the terms of this Agreement.
Do you accept all the terms of the preceding License Agreement? If you choose No, the setup will close. To install PCS Connection Manager, you must accept this agreement.
InstallShield
< Back
Yes
No

5. Click **Next** to install the software to the default destination folder (recommended). If you need to install the software to a different folder, click **Browse** and select an alternate installation location.


InstallShield Wizard
CF2031
Setup will install PCS Connection Manager in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\...\Sprint CF2031\PCS Connection Manager
Browse...
InstallShield
< Back
Next >
Cancel

6. Click **Finish** to complete the installation and launch the PCS Connection Manager.


InstallShield Wizard
InstallShield Wizard Complete
The InstallShield Wizard has successfully installed PCS Connection Manager. Before you can use the program, you must restart your computer.
Yes, I want to restart my computer now.
No, I will restart my computer later.
Remove any disks from their drives, and then click Finish to complete setup.
< Back
Finish
Cancel

7. Click **OK** when you are prompted to insert the PCS Connection Card. Connect the card to the PC Card adapter and insert the card/adapter unit into your Type II PC Card slot. (See "Inserting and Removing the PCS Connection Card" on page 23.)

Note: Do not forcefully insert the PCS Connection Card. This may damage connector pins.

Note: If your notebook has a compatible Type II Compact Flash slot, you do not need to use the PC Card adapter. Simply insert the PCS Connection Card directly into the notebook's Type II Compact Flash slot.

8. Windows will detect the new hardware (PCS Connection Card) and will install the necessary drivers. The **Add New Hardware** Wizard or **Found New Hardware** Wizard will launch, depending on your operating system. (For additional information about driver installation, see "Reinstalling the PCS Connection Card Driver" on page 99.)
9. Follow the onscreen prompts to allow the wizard to install the drivers.

Note: If the message "Digital Signature Not Found" appears, you will need to click **Yes** to properly install the hardware driver.

10. Click **OK** when you are notified that the installation is complete. If you are running Windows 98SE or Windows Me, restart your PC from the **Start** menu.

On completion of this step, the PCS Connection Manager Software and the PCS Connection Card driver are installed and you can proceed to activate your card. See "Activating Your PCS Connection Card" on page 24.

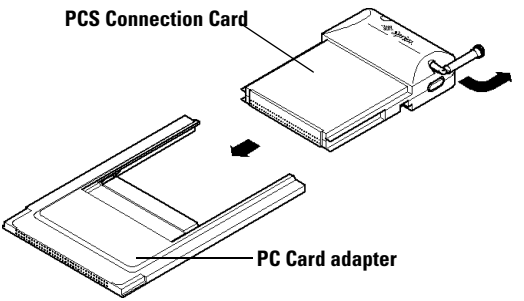
Inserting and Removing the PCS Connection Card

Inserting the PCS Connection Card

Before you insert the PCS Connection Card, you must first install the PCS Connection Manager Software. Once you have completed the software installation procedure, you may insert your card into your computer's PC Card slot.

To insert the PCS Connection Card into your notebook PC:

1. Connect the PCS Connection Card to the PC Card adapter.



2. Insert the card/adapter unit face up into the notebook's Type II PC Card slot. The 68-pin connector, located at the end of the adapter, should be inserted directly into the computer's Type II PC Card slot.

Note: If your notebook has a compatible Type II Compact Flash slot, you do not need to use the PC Card adapter. Simply insert the PCS Connection Card directly into the notebook's Type II Compact Flash slot.

Note: The PCS Connection Card should fit snugly, but you should be able to insert or remove it easily from your computer's PC Card slot.

When you insert the card, the following should occur:

- If sound effects are enabled, the PC beeps.
- The PC Card icon appears in the status area, unless the feature has been disabled.
- The PCS Connection Manager Software launches (unless the auto-launch feature has been disabled).

The card is powered as soon as you insert it.

Removing the PCS Connection Card

To remove the card:

1. Close the PCS Connection Manager program if it is open.
2. Click the Safely Remove Hardware icon in the system tray. A message bar appears.
3. Click **Safely remove Sprint CF2031 Modem** on the message bar. A dialog box will notify you that it is safe to remove the card.
4. Click **OK**.
5. Use the ejector to remove the card or card/adapter unit from the slot.

Activating Your PCS Connection Card

The final step to making the PCS Connection Card operational is configuring it to use your account.

Tip: For an overview of account activation and configuration, see "Activating and Using PCS Service" on page 12.

If you purchased a pre-activated PCS Connection Card, this step is not necessary. Once the application software and driver are installed, the card is ready for use.

Otherwise, you must use the Sprint Activation Wizard to activate and configure your account. Activation involves phoning PCS Customer Service Solutions, exchanging information and entering your account information into the appropriate fields in the wizard. You require a separate phone to activate your account.

To activate an account and configure your PCS Connection Card:

1. Insert the card into your Type II PC Card or Type II Compact Flash slot. The Activation Wizard will launch automatically.
2. Click **Next** to begin the activation process. The window will describe the process.
3. Please telephone PCS Customer Service Solutions to set up your PCS wireless network account. Inform your PCS Customer Solutions Specialist that you are activating a PCS Connection Card (model CF2031).

- If you will be using your PCS Connection Card primarily for business purposes, call **1-877-789-3969**.
- If your card is intended primarily for personal use, call **1-888-715-4588**.

You should have the following information available:

- Your billing address
- Your Social Security or Tax ID number
- Your driver's license number
- A pen and paper to write down your account information

During this call, PCS Customer Service Solutions will help you select your service plan and guide you through the activation process.

4. Click **Next** when you are asked for your card's 8-digit Electronic Serial Number (ESN). The third window will appear, which displays your card's ESN.
5. Carefully repeat the Electronic Serial Number to the Service Representative. You will then be given an activation code.
6. Enter the activation code into the Activation Code field and click **Next** to continue to the next window.

7. Once your PCS Customer Solutions Specialist has given you your card's phone number, enter the number in the top and bottom fields and click **Next** to continue.

Note: If the phone numbers you entered in the two fields do not match, a warning will appear requesting that you verify that the phone numbers entered are correct.

You have now successfully completed the activation process. Your phone number and lock code will be displayed at the bottom of the final activation window.

8. Click **Finish** to exit the Sprint Activation Wizard.

On completion of this step, Your PCS Connection Card is ready for use. Section 3A: The PCS Connection Manager Window (Notebook PCs) on page 43 explains how to use the PCS Connection Manager Software to manage and monitor your connections.

Installation on Pocket PCs

In This Section

- System Requirements
- Using the PCS Connection Card™ Battery Pack
- Installing the PCS Connection Manager℠ Software
- Inserting and Removing the PCS Connection Card™
- Configuring Your Account

This chapter guides you through the steps necessary to install your PCS Connection Card™ and make it operational on a Pocket PC. This requires that you connect the battery, install the PCS Connection Manager℠ Software, insert the card (with battery pack installed) into your Pocket PC and activate and configure your account (unless the card is pre-activated).

Getting Started

Since software cannot be installed directly to a Pocket PC, you will need a desktop or notebook computer to function as a "host." The installation, activation and configuration process follows these steps:

1. Connect the battery pack to the PCS Connection Card. (When using the PCS Connection Card with a Pocket PC, you must connect the battery pack; if not, fatal damage may occur to the Pocket PC.)
2. Install the software to the host.
3. Connect the Pocket PC to the host and download the software from the host to the Pocket PC. (You can connect the Pocket PC to the host before or after you install the software to the host.)
4. If the card has not been pre-activated, use the Sprint Activation Wizard to configure the card.

Before you begin the installation, ensure you have the necessary hardware, software, and system resources described in the next section.

System Requirements

The minimum system requirements for Pocket PCs (as well as their host computers) are as follows:

Pocket PC System Requirements

Operating System:

- Windows CE 3.0 MS Pocket PC, or
- Windows CE 3.0 Pocket PC 2002

If you do not know what version of Windows CE you are using, select **Start > Settings**, tap the **System** tab, and tap the **About** icon. If the second line on the screen reads, "Windows 3.0.9348 (Build…)", your operating system is Windows CE 3.0 MS Pocket PC. If the second line reads, "Windows 3.0.11171 (Build…)", your operating system is Windows CE 3.0 Pocket PC 2002.

Your Pocket PC must have:

- 500 kB of storage memory and 700 kB of program memory
- A Type II PC Card slot or Type II Compact Flash slot supporting 3.3V
- A method of connecting to a host computer, using either a serial autosync cable, USB autosync cable or infrared port

Special Note for Pocket PC Users: To function properly with IOTA protocol, the PCS Connection Card requires support for high-security 128-bit encryption. If the installer does not detect high-security support on your system, a warning will appear instructing you to install Microsoft High Encryption Pack for Pocket PC. Your host computer will then display a pop-up window instructing you to upgrade your Pocket PC Internet Explorer to support high encryption. Follow the onscreen instructions to update your system.

Host System Requirements

To use the PCS Connection Card and PCS Connection Manager Software with a Pocket PC, you require a desktop or notebook computer to function as the host that:

- Has the necessary port (serial, USB or infrared) to connect to the Pocket PC
- Has a CD-ROM drive
- Is running Windows 98SE, Me, 2000 or XP
- Has ActiveSync® version 3.1 or 3.5 installed (ActiveSync 3.5 is required if you are using Windows CE 3.0 Pocket PC 2002)

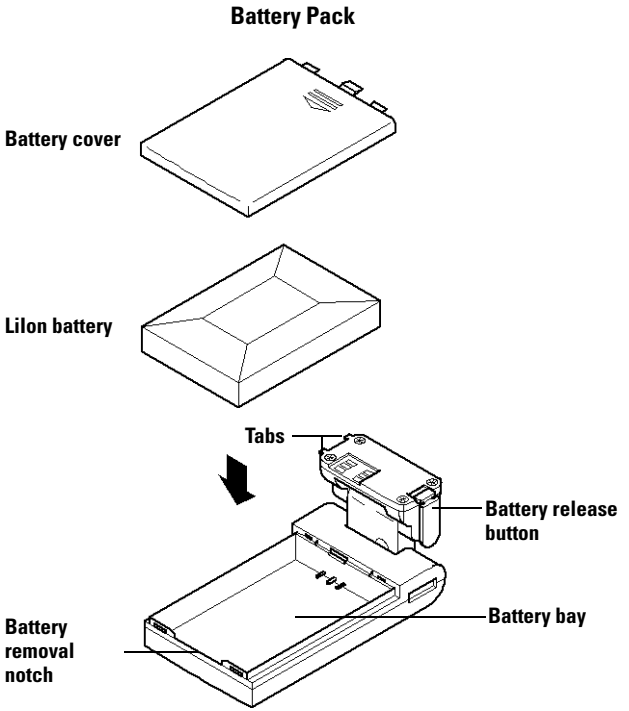
Note: ActiveSync® is software made by Microsoft and is included with all Pocket PCs running Windows CE 3.0 (the Pocket PC operating system).

Note: The Pocket PC-to-host connection, if serial or USB, should have been included with your Pocket PC.

Using the PCS Connection Card Battery Pack

Your PCS Connection Card comes with a partially-charged Lithium Ion battery, so you may use your card immediately after it is activated.

Assembling the Battery Pack



To insert the battery into the battery pack:

1. Remove the battery cover from the back of the battery pack by sliding it in the direction of the arrow.
2. Hold the battery so that the metal contacts on the base of the battery line up with the metal contacts on the base of the battery bay.
3. Place the battery into the battery bay, top edge first.
4. Replace the cover on the back of the battery pack.

Note: You MUST connect the battery pack when using the PCS Connection Card with a Pocket PC. If not, fatal damage may occur to the Pocket PC.

Removing the Battery

To remove the battery from the battery pack (if the battery pack isn't attached to the PCS Connection Card, skip to step 3):

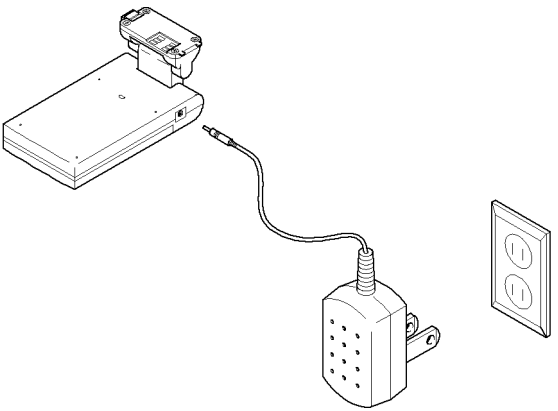
1. Turn off your PCS Connection Card by pressing and holding the power button, located next to the antenna.
2. Disconnect the battery pack from the PCS Connection Card by pressing the battery release button on the battery pack.
3. Remove the battery cover from the back of the battery pack by sliding the cover in the direction of the arrow.
4. Lift up on the battery removal notch at the bottom of the battery bay.

Note: If you remove the PCS Connection Card from your Pocket PC with the battery pack connected, the device will remain on. To avoid running down the battery, either disconnect the battery pack from the card or use the power button next to the antenna to power the card off.

Charging the Battery

You can tell whether or not your battery needs to be recharged by checking the indicator in the upper right corner of the PCS Connection Manager interface.

Charging With the AC Adapter Charger



Connect the round end of the AC adapter into the jack in the battery pack and plug the adapter into an electrical outlet. (See illustration above.)

The LED on the front of the battery pack indicates the following:

- A **red light** indicates that the battery is being charged.
- A **green light** indicates that the battery is at least 90% charged.

Using the AC adapter charger, a completely discharged battery can recharge fully in approximately 2.6 hours.

The Empty Battery Icon

A few minutes before the battery becomes completely discharged, the battery sensor will alert you by displaying a blinking, empty battery icon (). If you do not recharge the battery, the PCS Connection Card will shut off automatically.

Installing the PCS Connection Manager℠ Software

To install the software, you can either:

- Connect the host and the Pocket PC before you install the software to the host. (In this case, you are prompted to initiate the download as soon as the software installation is complete.)

— or —

- Install the software to the host and then connect the host and the Pocket PC to download the software, as described here.

This process installs the PCS Connection Manager Software and the PCS Connection Card drivers.

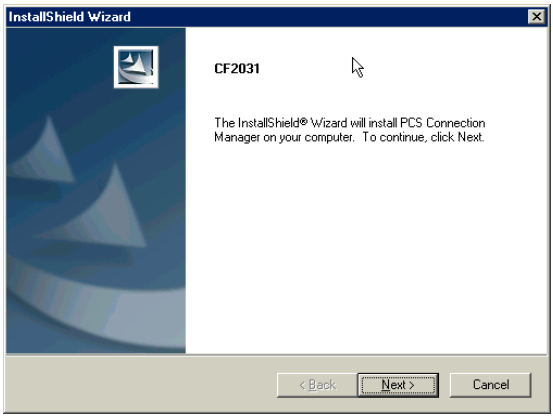
Installing the PCS Connection Manager Software on the Host

To install the software on the host:

1. Close any Windows programs that are running and insert the PCS Connection Manager installation CD in your CD-ROM drive. The CD should auto-start and display a menu.

2. If the CD does not auto-start, select **Start > Run** and enter **d:\launch.exe** where **d** is the drive letter of your CD-ROM drive.

3. From the CD start-up window, select **Pocket PC**. This will launch the InstallShield® Wizard.


InstallShield Wizard
CF2031
The InstallShield® Wizard will install PCS Connection Manager on your computer. To continue, click Next.
< Back
Next >
Cancel

4. Use the **Next** and **Back** buttons to navigate through the wizard, noting the following:

- You must indicate your acceptance of the terms of the license agreement by clicking **Yes** to proceed with the installation.
- Using the default settings for the Destination Location and Program Folder is recommended. If you need to install the software to a different folder, click **Browse** and select an alternate installation location.
- A dialog box displays this message, "On the next mobile device connection, the installed application will be downloaded to the device." Click **OK**.
- A check box allows you to choose to display release notes. The release notes list known issues in the software and are displayed in the Windows Notepad. (If you choose to display them, when you are finished reading, use the close box in the upper right corner of the window to close the Notepad.)
- Click **Finish** to close the last screen of the wizard.
- Use the **exit** option in the lower left corner of the window to close the CD start-up menu.

Downloading the Software to the Pocket PC

To download the software to the Pocket PC:

1. Connect the Pocket PC to the host via serial cable, USB cable or infrared port. This will launch the ActiveSync® program.

Note: If you are unable to establish a connection, launch ActiveSync® from the Start menu and use the online help in ActiveSync®.

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2. If your ActiveSync® is configured to show the New Partnership window, the initial prompt should read, "Would you like to set up a partnership?" A New Partnership is not required to download software. Select either **Yes** or **No** and click "Next."
3. Select **Yes** when asked to "Install the PCS Connection Card using the default application install directory?"
4. When the download is complete, select **OK** when prompted, "Please check your mobile device screen to see if additional steps are necessary to complete this installation."
5. Disconnect the Pocket PC from the host. You can then insert the PCS Connection Card following the procedures outlined in the next section.

On completion of this step, the PCS Connection Manager Software and the PCS Connection Card driver are installed and you can proceed to activate your card. See "Activating Your PCS Connection Card" on page 38.

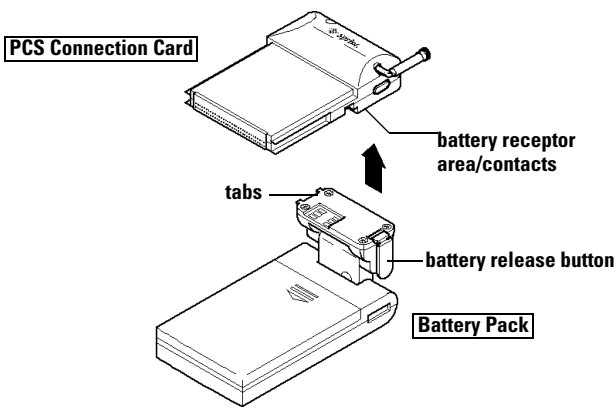
Inserting and Removing the PCS Connection Card

Inserting the PCS Connection Card

To insert the PCS Connection Card into a Pocket PC:

1. If the PCMCIA jacket accessory is not already attached, slide the Pocket PC bottom first into the jacket. It should click into place.
2. Connect the battery pack to the PCS Connection Card.

- Remove the protective rubber cover from the back of the PCS Connection Card to expose the device's metal contacts and battery receptors.
- Insert the tabs on the swiveling battery pack head into the receptors on the card at a 45-degree angle. Make sure you align the metal contacts on the battery pack and the card.
- Press the battery pack into place and secure it to the card by pressing in the battery release button until the pack is in place and then releasing the button. The battery pack will click into place.



Caution: You MUST connect the battery pack when using the PCS Connection Card with a Pocket PC. If not, fatal damage may occur to the Pocket PC.

3. With the Sprint label facing toward the front of the Pocket PC, insert the card into the Type II Compact Flash slot at the top of the jacket. **DO NOT FORCE**.

Note: If your Pocket PC has a compatible Type II PC Card slot instead of a Compact Flash slot, you must connect the PC Card adapter to the PCS Connection Card before inserting the card into the Pocket PC's Type II PC Card slot. (See illustration on page 23.)

The card is powered as soon as you insert it.

Removing the PCS Connection Card

1. Close any applications that have an open connection.
2. Use the ejector to release the card and remove it from the slot.
3. Disconnect the PCS Connection Card from the battery pack by pressing the battery release button and removing the battery pack at a 45-degree angle. (See illustration on page 36.)

Note: If you remove the PCS Connection Card with the battery pack connected, the card will remain on. To avoid running down the battery, either disconnect the battery pack from the card or press and hold the power button on the PCS Connection Card, located next to the antenna, to power the card off.

Note: On Pocket PCs, anytime you eject and re-insert the PCS Connection Card, restart your Pocket PC by turning it off and on again. This step is necessary to ensure the communication port detects the card.

Activating Your PCS Connection Card

The final step to making the PCS Connection Card operational is configuring it to use your account.

Tip: For an overview of account activation and configuration, see "Activating and Using PCS Service" on page 12.

If you purchased a pre-activated PCS Connection Card, this step is not necessary. Once the application software and driver are installed, the card is ready for use.

Otherwise, you must use the Sprint Activation Wizard to activate and configure your account. Activation involves phoning PCS Customer Service Solutions, exchanging information and entering your account information into the appropriate fields in the wizard. You require a separate phone to use activate your card.

To activate an account and configure your PCS Connection Card:

1. Insert the card into your Type II Compact Flash or, with the PC Card adapter, the Type II PC Card slot. The Activation Wizard will launch automatically.
2. Click **Next** to begin the activation process. The window will describe the process.
3. Please telephone PCS Customer Service Solutions to set up your PCS wireless network account. Inform your PCS Customer Solutions Specialist that you are activating a PCS Connection Card (model CF2031).

- If you will be using your PCS Connection Card primarily for business purposes, call **1-877-789-3969**.
- If your card is intended primarily for personal use, call **1-888-715-4588**.

You should have the following information available:

- Your billing address
- Your Social Security or Tax ID number
- Your driver's license number
- A pen and paper to write down your account information

During this call, PCS Customer Service Solutions will help you select your service plan and guide you through the activation process.

4. Click **Next** when you are asked for your card's 8-digit Electronic Serial Number (ESN). The third window will appear, which displays your card's ESN in the top field.
5. Carefully repeat the Electronic Serial Number to the Service Representative. You will then be given an activation code.
6. Enter the activation code into the Activation Code field and click **Next** to continue to the next window.
7. Once your PCS Customer Solutions Specialist has given you your card's phone number, enter the number in the top and bottom fields and click **Next** to continue.

Note: If the phone numbers you entered in the two fields do not match, a warning will appear requesting that you verify that the phone numbers entered are correct.

You have now successfully completed the activation process. Your phone number and lock code will be displayed at the bottom of the final PCS Connection Card Activation window.

8. Click **Finish** to exit the Sprint Activation Wizard.

On completion of this step, your PCS Connection Card is ready for use. Section 3B: The PCS Connection Manager (Pocket PCs) on page 61 explains how to use the PCS Connection Manager Software to manage and monitor your connections

Using the PCS Connection Card™

The PCS Connection Manager℠ Software (Notebook PCs)

In This Section

- The PCS Connection Manager
- The PCS Connection Manager Window
- Menu items
- Taskbar icons
- Establishing and Terminating Connections
- PCS Connection Manager Settings

This chapter outlines the PCS Connection Manager℠ interface for your notebook PC, including the components of the main window, button usage, taskbar icons and more. Once you've mastered the basics here, you'll be ready to begin using your PCS Connection Card™.

The PCS Connection Manager

PCS Connection Manager Software allows you to manage and monitor the connection between your PCS Connection Card and the enhanced Sprint Nationwide PCS Network. Use the PCS Connection Manager to:

- Determine your signal strength, roaming status, PCS Vision availability, and other network connection parameters
- Initiate voice and data calls
- View call statistics and Web messages
- Enable and disable features like *Window always on top* (which allows you to set the card software to display in front of other application windows)
- Set options related to Web messages, sounds played, voice calls, and the lock code security feature (which you can use to prevent others from using your card)

Anytime you use the PCS Connection Card you must run the PCS Connection Manager Software.

Starting the PCS Connection Manager Software

On a notebook PC, you can launch the PCS Connection Manager Software by:

- Double clicking the **PCS Connection Manager** icon on your desktop

– or –

- Selecting **Start** > **Programs** > **Sprint CF2031** > **PCS Connection Manager**

Depending on your settings, the software launches automatically anytime you insert the PCS Connection Card.

Once you make a connection using the PCS Connection Manager Software, you can launch whichever application you want to use (such as your Web browser or email application).

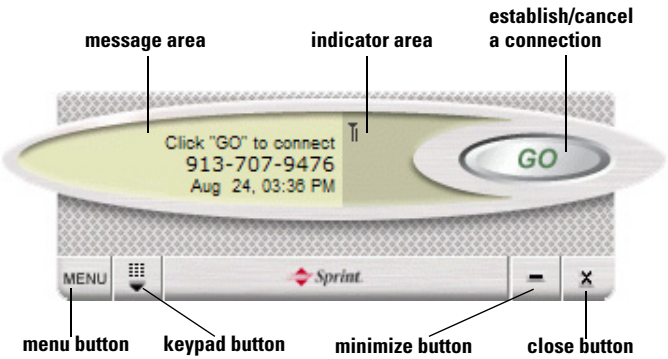
On notebook PCs, use the Close button in the lower right corner to exit. See page 46.

The PCS Connection Manager Window

The PCS Connection Manager features its own Custom Main Interface (CMI) window. It includes these components:

- A Menu button in the lower left corner
- A Minimize and Close button in the lower right corner
- A message area (in the upper left area)
- An indicator area (near the middle of the screen)
- A button ("GO") used to establish/cancel a connection

PCS Connection Manager Main Window



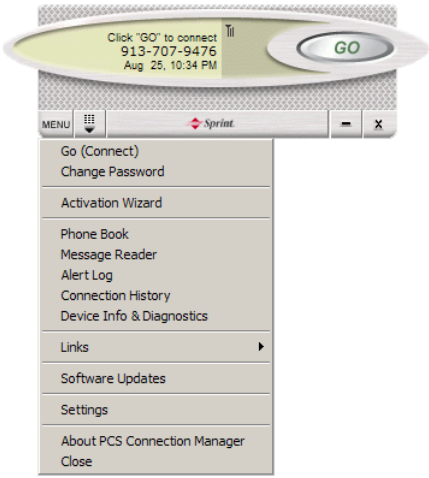
About the Interface

The following application functions are available within the PCS Connection Manager main window:

- Close: Closes the interface.
- Go: Initiates a connection.
- Minimize: minimizes the interface.
- Menu: provides access to tools and settings options.
- Stop: Disconnects an active connection.
- Connection status: Displays *Please insert card*, *Click "GO" to connect*, *Connecting* or *Connected* states.
- Signal strength: Visual indicator of signal strength.

Secondary Menu Options

Clicking the Menu button, located at the lower left of the interface, launches the PCS Connection Manager secondary menu.



If there is a Dial-up Networking Connection available, the *Go (Connect)* menu selection expands to reveal a submenu containing all available connections. The *Go (Connect)* menu does not open a submenu if only the PCS Vision Connection is available. The *Go (Connect)* menu is replaced by *Stop (Disconnect)* once you establish a connection.

Keypad Button (Notebook PCs)

The keypad button displays and hides the keypad, used to place or answer voice calls. For more information, see "Using the Keypad" on page 79.

The Minimize and Close Buttons (Notebook PC)

The Minimize button hides the window but leaves the program running. When the program is minimized, its icon in the status area can be used to determine the card status. (See page 51.)

Once minimized, you can redisplay the program by double clicking the desktop shortcut or launching the card software from the Start menu.

(See page 44.) You can also click the icon in the status area. (The icons are shown in the section "Taskbar Icons" on page 51.)

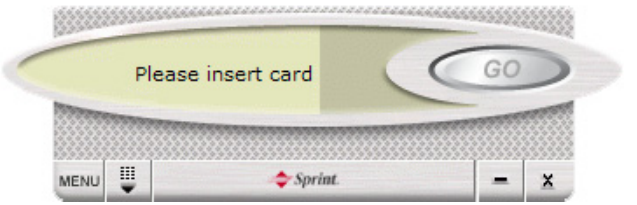
The Close button is used to exit the card software.

Connection Status

The PCS Connection Manager interface provides information about your current connection status.

Please insert card

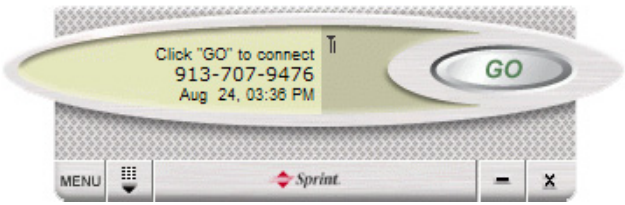
If the PCS Connection Manager fails to detect a PCS Connection Card, the following message displays:



Note: The **GO** button is unavailable to indicate it cannot be clicked. Also note that the signal strength icon is not visible.

Click "GO" to connect (Ready)

The **GO** button is available and the signal strength icon is visible. Click **GO** to initiate a connection.



Connecting

The signal strength icon is replaced by the transmitting/receiving icon ( ) and the **GO** button changes to **STOP**.

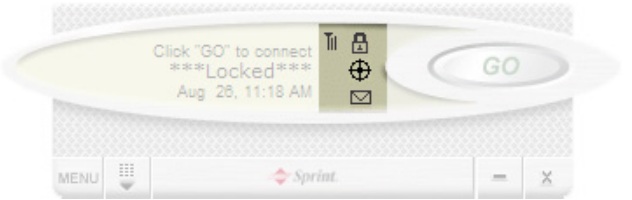
Connected

Once the connection is established, the message area displays "Connected" and "Click 'Stop' to disconnect."

For other messages, see "Troubleshooting Tips (Notebook PCs)" on page 95.

Indicator Area

Notebook PCs Indicator Area



The indicator area displays icons that notify you when you receive messages and indicate whether certain options and features are enabled.

Indicator Area Icons

Icon	Meaning
	Note: This icon is displayed only when voice and data services are available. The Signal Strength indicator uses bars to show the intensity of the radio signal. The number of bars increases as signal strength increases to a maximum of four bars. **Tip:** Optimal signal strength is obtained when the antenna is perpendicular to the card.
	When no bars are shown, no connection is possible for one of these reasons: ▶ No antenna is attached ▶ You are outside the CDMA network coverage area ▶ The signal strength is too weak ▶ A network or account problem is preventing the PCS Connection Card from obtaining service Once a connection is established, this icon is replaced by the transmitting/receiving icon ( ).

Indicator Area Icons (Continued)

Icon	Meaning
	You have unread Web messages. To display the Web Messaging window (in which the messages are displayed), select **MENU** >**Message Reader**. For instructions on reading Web messages, see page 90.
	When the transmitting/receiving icon is solid, a PCS Vision data connection is active.
	The PCS Connection Card is in lock mode (see "Lock Tab" on page 56).
	The PCS Connection Card's location feature is enabled (see "Location Tab" on page 58).
	The PCS Connection Card is roaming off the enhanced Sprint Nationwide PCS Network. **Note:** This icon is displayed only when voice and data services are available. When the indicator is **on (solid black)**, you are in a "preferred" roaming area. When the indicator is **blinking**, you are within the coverage area of a CDMA network but not in a "preferred" roaming area. Your coverage area and billing charges depend upon Sprint and the type of account you have. There may be surcharges for roaming service that vary based on whether you are in a preferred roaming area or a non-preferred roaming area. If there is no roaming agreement between Sprint and the local carrier, you may be unable to complete calls in non-preferred roaming areas.
	The PCS Connection Card is configured to support a TTY device (see "TTY" on page 55).

GO Button

The GO button is used to establish and cancel a connection. The text on the button changes during different connection stages:

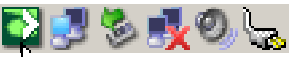
- **GO** – Ready to establish a connection. Click the button to start a connection (if only one connection is defined), or to display a list from which you can select a connection (if more than one connection is defined).
- **Stop** –

A connection is being established or is established. If you click the button, the connection will be canceled.

Taskbar Icons

The PCS Connection Manager Software displays an icon in the status area. The status area icon indicates your connection status.

On notebook PCs, the icon is in the status area (which is located in the lower right corner of your screen).



Status Icon (active)

Status Icons

Status Area Icons

Icon	Meaning
	You are in service on the CDMA network but have no active data connection.
	You have an active data connection.
	You have an active data connection; however, no data is currently being transmitted or received (dormant).

Establishing and Terminating Connections

The PCS Connection Manager interface can be used to establish and terminate connections with the PCS Connection Card.

Managing Connections

In addition to connecting immediately using the PCS Connection Manager interface, you can create a new PCS Vision Connection, a Dial-up Networking Connection or edit a previously created connection. New PCS Vision Connections can be stored on your notebook or Pocket PC. Dial-up Networking Connections are always stored on your notebook PC.

For information on using the PCS Connection Manager to establish, terminate and manage connections, see Section 3C: Data Connections beginning on page 71.

PCS Connection Manager Settings

The Settings window allows you to configure the PCS Connection Manager Software to suit your preferences. In the Settings window you can:

- Enable and disable several features, including Window Always on Top, Connection History, Call Restriction, Voice Privacy, audible Key Beep, TTY functionality, the Lock Code and Location Service.
- Configure options related to ringers, tone lengths and emergency numbers.

Accessing Settings

1. Click **Menu** on the PCS Connection Manager interface.
2. Select **Settings** from the submenu.

Note: For details on additional items available through the PCS Connection Manager's **Menu** button, see Section 3E: Menu Options beginning on page 85.

Settings Window

The Settings window contains five tabs: General, Sound, Advanced, Lock and Location.

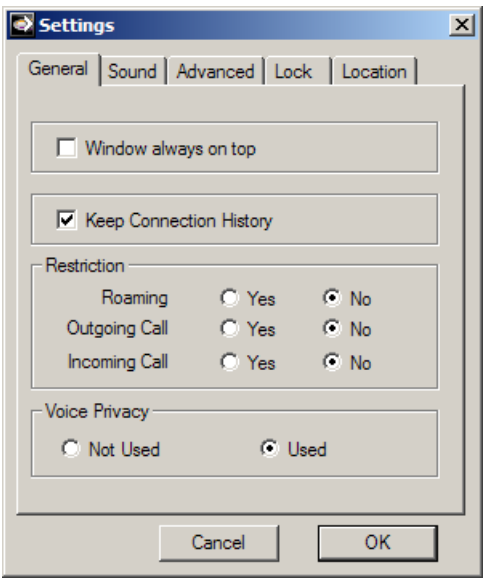
General Tab

Set general PCS Connection Manager settings by checking or unchecking the radio buttons:

- **Window always on top** - When checked, the PCS Connection Manager window displays in front of all other open application windows, even if another window is placed over the PCS Connection Manager window.
- **Keep Connection History** - When selected, the PCS Connection Manager logs all connections in the connection history. (For details on Connection History, see page 91.)
- **Restriction** - Choose whether to permit or forbid Roaming Calls, Outgoing Calls or Incoming Calls.
- **Voice Privacy** - Choose whether or not to use the PCS Connection Card's Voice Privacy feature.

When finished, click **OK** to save changes and close Settings dialog box.

Settings: General Tab



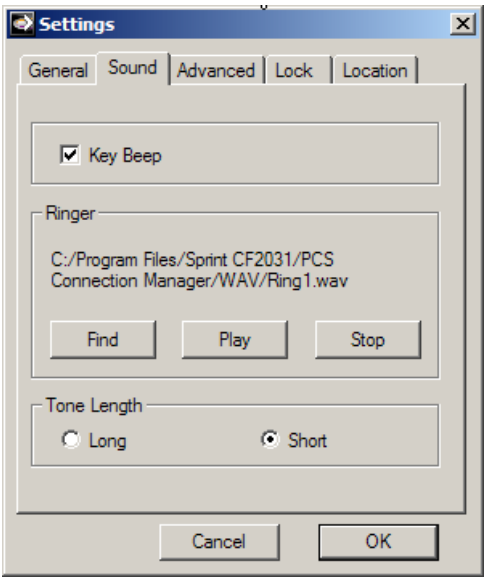
Sound Tab

1. Select **Key Beep** to play a sound when entering numbers on the voice keypad.
2. Select a ringer type for incoming voice calls.

- Click **Find** to locate available .wav ringer files.
- Click **Play** to preview a selected ringer.
- Click **Stop** to cancel/stop playback.

3. Select a tone length for keypresses while entering numbers on the voice keypad. (Longer tone lengths may be better for tone recognition when dialing voicemail or other automated systems.)
4. Click **OK** to save changes and close the Settings dialog box.

Settings: Sound Tab



Advanced Tab

Configure advanced TTY and Emergency Call settings.

TTY

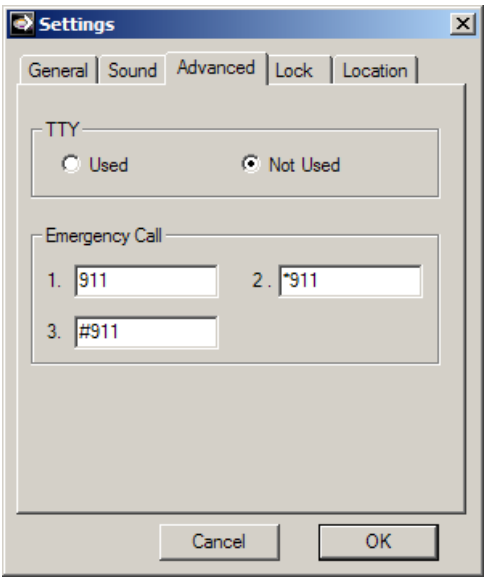
A TTY (a TeleTYpwriter, also known as a TDD or Text Telephone) is a communications device that allows people with hearing or speech impairments to communicate over phone systems by using a keyboard.

If you will be using the PCS Connection Card's TTY functionality, select **Used**. The TTY icon will appear in the indicator area. You may then attach a TTY device to the PCS Connection Card's headset connector and begin using the TTY device. If you will not be using a TTY device, select **Not Used** (the default setting).

Emergency Call

Select and enter three numbers you may call during an emergency, even if the PCS Connection Manager software is locked. (For information on locking and unlocking the PCS Connection Card, see page 56.)

Settings: Advanced Tab



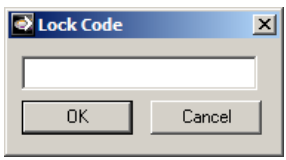
- Click **OK** to save changes and close the Settings dialog box.

Lock Tab

The Lock Code feature can be used to prevent others from using your PCS Connection Card and your account. When the lock code is enabled, the PCS Connection Manager main window will display *****Locked***** and the lock icon will appear in the indicator area.

While the card is in lock mode, you may not launch a data session or place an outgoing voice call without first entering your four-digit lock code. (The default lock code is the last four digits of your PCS Connection Card phone number.) During lock mode, you may still receive incoming voice calls.

Any time you click on the lock tab from the Settings menu of the PCS Connection Manager, you will be prompted to enter your lock code.



Enter your lock code and click **OK** to enter the lock tab menu.

Tip: Your default lock code is the last four digits of your PCS Connection Card's phone number. If you can't recall your lock code, call PCS Customer Solutions at 1-888-211-4PCS (4727).

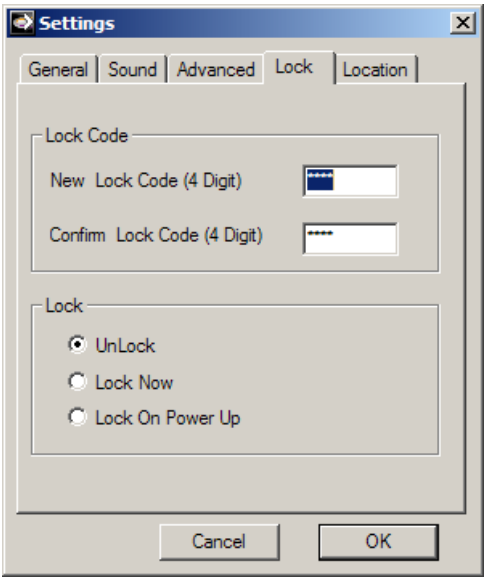
- To change your lock code, enter your new lock code in the first field and confirm the new code by re-entering it into the second field.

Note: Running the Activation Wizard resets the lock code to the last four digits of the most recently activated phone number.

- Select a lock status: **UnLock** to leave the PCS Connection Card unlocked, **Lock Now** to enable the lock code feature immediately and **Lock On Power Up** to set the PCS Connection enable the lock code feature the next time the card powers up.
- Click **OK** to save changes and close the Settings dialog box.

Note: The PCS Connection Manager interface will allow you to place outgoing calls to emergency numbers (see "Advanced Tab" on page 55), even if the PCS Connection Card is locked.

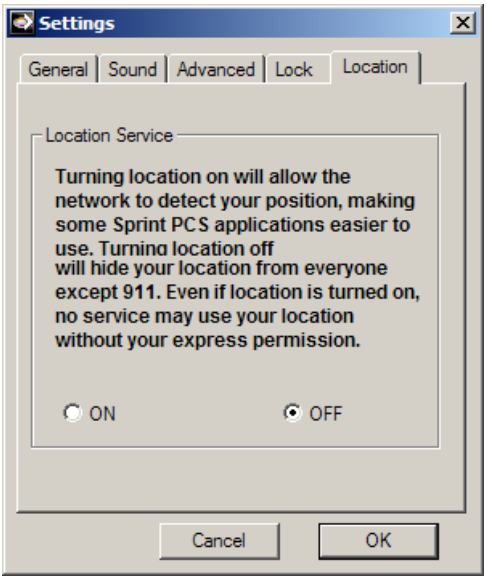
Settings: Lock Tab



Location Tab

Select whether you would like to enable the PCS Connection Card's location service. Turning location on will allow the network to detect your PCS Connection Card's position, making some PCS applications easier to use. Turning location off will hide your location from everyone except 911 emergency personnel.

Settings: Location Tab


Settings
General
Sound
Advanced
Lock
Location
Location Service
Turning location on will allow the network to detect your position, making some Sprint PCS applications easier to use. Turning location off will hide your location from everyone except 911. Even if location is turned on, no service may use your location without your express permission.
ON
OFF
Cancel
OK

Note: No service may use your location without first obtaining your express permission, even if location is turned on.

Select **ON** or **OFF**. Click **Yes** to accept the new setting and click **OK** to save changes and close the Settings dialog box.

Accessing Links

For your convenience, Sprint incorporates links to select PCS products and services within the PCS Connection Manager menu. To access these links:

1. Click **Menu** on the PCS Connection Manager interface.
2. Select **Links** from the submenu.
3. Select **PCS Web Site** or **PCS Business Connection!**

Note: The PCS Connection Manager interface Links menu does not allow you to add/remove links. Continue to manage direct links to your favorite web sites through your web browser.

The PCS Connection Manager℠ Software (Pocket PCs)

In This Section

- **The PCS Connection Manager**
- **Components of the PCS Connection Manager window**
- **Menu items**
- **Taskbar icons**

This chapter outlines the PCS Connection Manager℠ interface for your Pocket PC, including the components of the main window, button usage, taskbar icons and more. Once you've mastered the basics here, you'll be ready to begin using your PCS Connection Card™.

The PCS Connection Manager

PCS Connection Manager Software allows you to manage and monitor the connection between your PCS Connection Card and the enhanced Sprint Nationwide PCS Network. Use the PCS Connection Manager to:

- Determine your signal strength, roaming status, PCS Vision availability, and other network connection parameters
- Initiate voice and data calls
- View call statistics and Web messages
- Set options related to Web messages, sounds played, voice calls, and the lock code security feature (which you can use to prevent others from using your card)

Anytime you use the PCS Connection Card you must run the PCS Connection Manager Software.

Starting the PCS Connection Manager Software

On a Pocket PC, you can launch the PCS Connection Manager Software by selecting **Start > PCS Connection Manager**.

Depending on your settings in the Options window, the software launches automatically anytime you insert the PCS Connection Card.

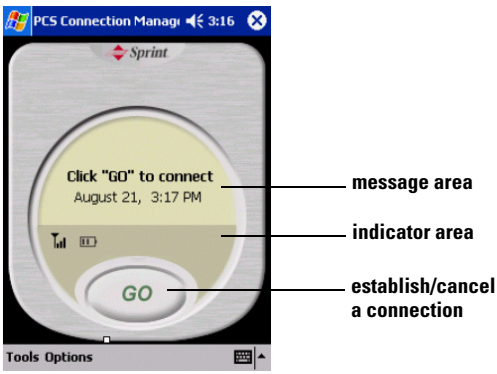
Once you make a connection in the card software, you can launch whichever application you want to use (such as your Web browser or email application).

On Pocket PCs, when you open another application, the card software remains running although it is not visible. Windows CE manages your applications, shutting down applications that are not being used in order to save memory. It should not be necessary to close the card software, but you can close the software by tapping CTRL + Q on the soft keyboard.

The PCS Connection Manager Window

The PCS Connection Manager window provides useful information about your connection, including:

- Connection status
- Signal strength
- Call/connection duration
- Messages



About the Interface

- **Battery:** This icon displays the card's battery charge state.
- **Antenna:** The antenna icon in the indicator area indicates signal strength. More bars indicate a stronger signal.
- **Tools:** Menu
- **Options:** Submenus
- **Date/Time:** Indicates Today's Date/Time
- **Mode State:** The *Ready to Connect* state is the default state. In it, the Connection Manager is ready to connect to the CDMA network.
- **Message:** Message
- **Go/Stop:** Establish/cancel a connection.

Connection Status

The PCS Connection Manager interface provides continual information about your card's current connection status.

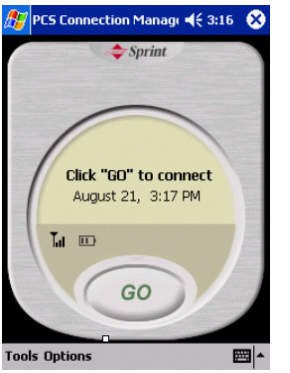
When connecting for the first time, then PCS Connection Manager will first search for the PCS Connection Card.

Please insert card

If the PCS Connection Manager fails to detect a PCS Connection Card, the following message displays:

Ready

If the PCS Connection Card is properly installed, the message area will indicate that the card is in Ready mode. In Ready mode, the card is in communication with the enhanced Sprint Nationwide PCS Network but there is no current active connection.

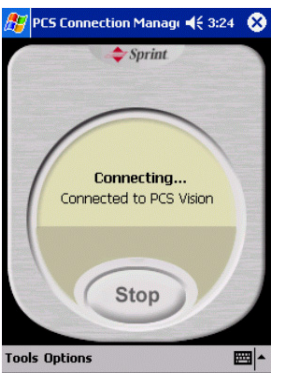


The Ready mode is the card's default state. In it, the PCS Connection Manager is ready to connect to the enhanced Sprint Nationwide PCS Network. The "GO" button is available and the signal strength icon is visible.

Click **GO** to initiate a connection.

Connecting

The "GO" button changes to "STOP."



Connected

Anytime the PCS Connection Card has an active connection (or is attempting to make a connection) it is in connected mode. In this mode, indicators like signal strength are not updated and display the status as of the moment you tapped the "GO" button.

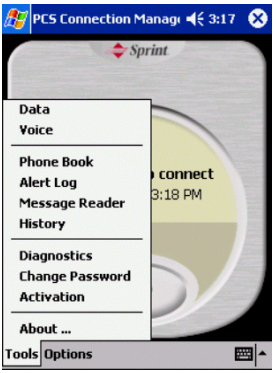
Once the connection is established, a transmitting/receiving icon ( ) replaces the signal strength icon.

Displaying Menu Items

The menus are described in detail in "Menu Options" on page 85.

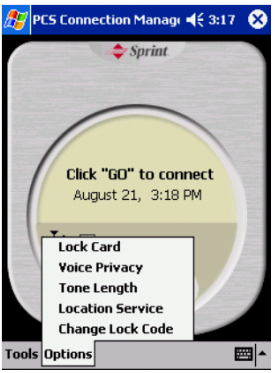
Tools

To display the menu items, click **Tools**, located in the lower left corner of the PCS Connection Manager window.



Options

To display the Options menu items, click **Options**, located next to the Tools menu. The Options items may be activated or deactivated by clicking on each individual item.



Indicator Area

Pocket PCs

The indicator area displays icons that notify you when you receive messages and indicate whether certain options and features are enabled.

Indicator Area Icons

Icon	Meaning
	Note: This icon is displayed only when voice and data services are available. The Signal Strength indicator uses bars to show the intensity of the radio signal. The number of bars increases as signal strength increases to a maximum of four bars. **Tip:** Optimal signal strength is obtained when the antenna is perpendicular to the card.
	When no bars are shown, no connection is possible for one of these reasons: ▶ No antenna is attached ▶ You are outside the CDMA network coverage area ▶ The signal strength is too weak ▶ A network or account problem is preventing the PCS Connection Card from obtaining service Once a connection is established, this icon is replaced by the transmitting/receiving icon ( ).
	You have unread Web messages. To display the Web Messaging window (in which the messages are displayed), select **MENU** >**Message Reader**. For instructions on reading Web messages, see page 90.
	When the transmitting/receiving icon is solid, a PCS Vision data connection is active.

Indicator Area Icons (Continued)

Icon	Meaning
	The PCS Connection Card is in lock mode (see "Lock Tab" on page 56).
	The PCS Connection Card's location feature is enabled (see "Location Tab" on page 58).
	The PCS Connection Card is roaming off the enhanced Sprint Nationwide PCS Network. **Note:** This icon is displayed only when voice and data services are available. When the indicator is **on (solid black)**, you are in a "preferred" roaming area. When the indicator is **blinking**, you are within the coverage area of a CDMA network but not in a "preferred" roaming area. Your coverage area and billing charges depend upon Sprint and the type of account you have. There may be surcharges for roaming service that vary based on whether you are in a preferred roaming area or a non-preferred roaming area. If there is no roaming agreement between Sprint and the local carrier, you may be unable to complete calls in non-preferred roaming areas.

GO Button

The GO button is used to establish and cancel a connection. The text on the button changes during different connection stages:

- **GO** – Ready to establish a connection. Click the button to start a connection (if only one connection is defined), or to display a list from which you can select a connection (if more than one connection is defined).
- **Stop** –

A connection is being established or is established. If you click the button, the connection will be canceled.

Data Connections

In This Section

- **Basic Data Connection Information**
- **PCS Vision℠ Connections**

This section provides an overview of the high-speed data connection available through your PCS Connection Card™ and how best to take advantage of the card's versatility.

The Basics

The GO button on the PCS Connection Manager℠ window is used to launch data connections for any of these purposes:

- Browsing the Internet
- Receiving email

The PCS Connection Card functions as a network card using a PCS Vision data connection. In this type of connection, the card establishes a high-speed (PCS Vision) Internet connection to the CDMA network. (You do not need to provide a phone number and there is no dialing involved.) This connection has average speeds of 50-70 kbps with a maximum speed of up to 144 kbps but it is only available in areas where PCS Vision has been implemented.

Note: Depending on your billing plan, there may be a surcharge for PCS Vision calls.

Note: You cannot make phone calls with the PCS Connection Card during active PCS Vision connections. You can make phone calls during dormant PCS Vision connections. (See page 75.)

The PCS Vision connection provides access to the Internet. Once the connection is established, you can open your browser and connect to any Web site that is accessible through the Internet, or access other Internet services (such as email).

The PCS Connection Card is "active" in a PCS Vision connection when data transmission is occurring. If data transmission stops for a period of time, the card becomes "dormant." (See page 75.)

If you also use another wireless network card with your computer, eject the additional card before you use the PCS Connection Card. Under some operating systems, if both cards are inserted, then the path that the Internet Protocol (IP) traffic will take is not predictable. If the data gets routed through the other card, you will experience slower data transfer rates.

PCS Vision (High-Speed) Connections

Important: If the following icon appears in the indicator area of the PCS Connection Manager window, you do not currently have PCS Vision service and cannot make a connection:

Start Connection Manager

To access the PCS Connection Manager, double-click the icon in your system tray ( ) or right-click the icon and select **Show PCS Connection Manager** from the shortcut menu.

If you don't see the icon in your system tray, the PCS Connection Manager is not running.

To start the PCS Connection Manager Software:

- Double-click the **PCS Connection Manager** icon on your desktop.

– or –

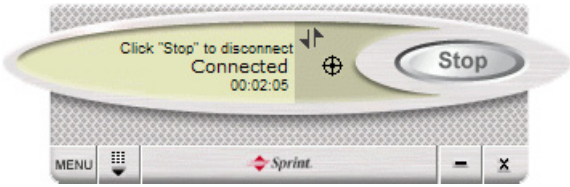
- Select **Start** > **Programs** > **Sprint CF2031** > **PCS Connection Manager**. (To launch the PCS Connection Manager Software on your Pocket PC, select **Start > PCS Connection Manager**.)

You'll see the small icon in your system tray and the PCS Connection Manager launch window.

To make a PCS Vision connection:

- From the PCS Connection Manager window, click the **GO** button.

The PCS Connection Manager program then initiates the connection. Progress is shown in the message area ("Connecting", "Authenticating"). Once the connection is established, "Connected" and the duration of the connection appears in the message area:



If you are running Windows 2000 or Windows XP and having problems establishing a connection, see page 98.

Tip: Depending on an option in the Settings window, a message warning you of a possible surcharge for PCS Vision service may be displayed whenever you establish a PCS Vision connection.

Once the connection is established, you can use any Internet application (such as Internet Explorer, Netscape Navigator, or your email application).

To terminate a PCS Vision connection:

- Click the **Stop** button.

Dormant Connection

The PCS Connection Card is "active" during PCS Vision connections when data transmission is occurring. If data transmission over the network stops for a period of time, the card becomes "dormant." The period of inactivity that causes the card to become dormant is set by Sprint and is always less than one minute.

Note: Some programs may be unable to function on a dormant connection.

During dormant PCS Vision connections, the following icon appears in the status area at the bottom right of your notebook PC screen:

When the card is in this state, you are not able to make or receive phone calls with the card, but the connection is not lost. When you resume browsing the Internet, data transmission is automatically resumed.

When the card has an active PCS Vision connection, you cannot make or receive phone calls.

Voice Connections

In This Section

- The Keypad
- Outgoing Calls
- Incoming Calls
- Voicemail

You can use your PCS Connection Card™ to transform your notebook or Pocket PC into a wireless phone simply by connecting a headset to the card and using the PCS Connection Manager℠ interface to place and receive voice calls.

Voice Connection Features

The PCS Connection Card offers many convenient voice features:

- The volume control allows you to adjust ringer or incoming voice volume.
- Selecting the **TALK** button allows you to redial the previously dialed number.
- The **Phone Book** allows you to keep a record of frequently used phone numbers and to dial a number simply by highlighting it and clicking **Call** (notebook PC) or by selecting the Phone Book header and clicking (Pocket PC). (Page 88, page 89)
- The **Connection History** records details about all incoming and outgoing calls, providing useful information such as the phone numbers of missed calls. (Page 91.)
- If your PCS Service Plan includes Three-Way Calling, Voicemail, Call Alert or Caller ID, they are supported by the card.

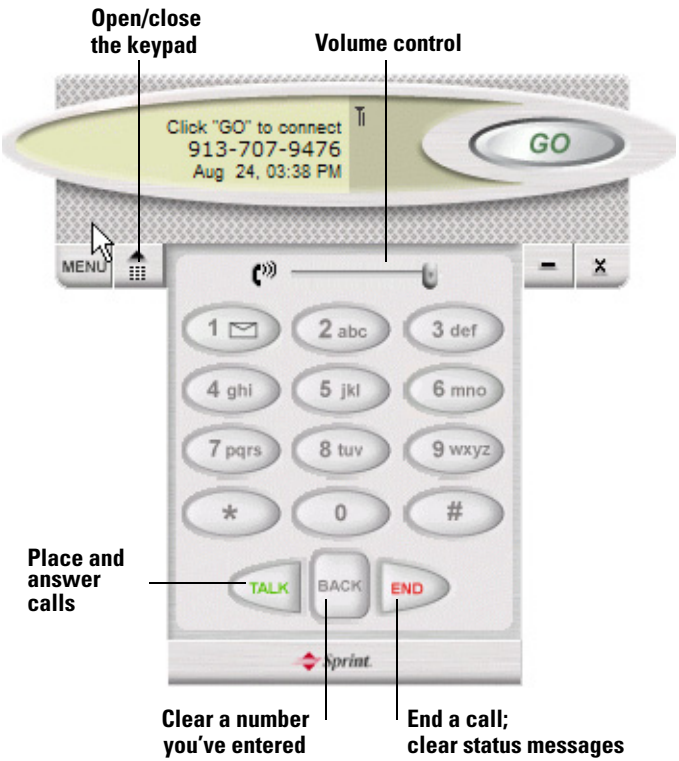
Using the Keypad

The keypad is used to answer and place voice calls. The keypad performs the same functions as the keypad on a mobile phone.

Tip: You can store frequently dialed numbers in the Phone Book and dial directly from the Phone Book window instead of entering the number on the keypad. See page 88 (notebook PCs) or page 89 (Pocket PCs).

Notebook PC

The keypad is displayed when you click the keypad button, located next to the MENU button in the lower left corner of the PCS Connection Manager window.



Pocket PC

The keypad is displayed when you tap **Tools** > **Voice**.

Notebook PC: To hide the keypad, click the keypad button

Pocket PC: To switch from the keypad to the data connection screen, tap **Tools** > **Data**.

The PCS Connection Manager Keypad

Keypad Buttons	Function
0-9, #, * **(or the same keys on your keyboard)**	Enter the digits (and other characters) you want to dial. The numbers are displayed in the message area until you press **TALK**, **END**, or **BACK**, or you receive an incoming call. If you click (or press) these buttons during a call, the card beeps and the characters are displayed in the message area.
1	In addition to acting as a number key, the **1** key can be used to access voicemail. Press the **1** key followed by **TALK** to connect to your voicemail.
TALK **(<Enter> on your keyboard)**	Place and answer incoming calls. When you are not receiving an incoming call, **TALK** dials the numbers in the message area. If no numbers are displayed, the card redials the last number you dialed.
END **(<Esc> on your keyboard)**	End a call or clear all the digits and characters in the message area (cancel a call that you've started to enter). This button also clears most status messages.
BACK **(<Backspace> on your keyboard)**	Clear the last number you've entered. Press and hold **BACK** to clear an entire entry.
Volume Control	Increase or decrease the headset volume. Notebook PCs: To increase the volume, move the slider to the right. To decrease the volume, move the slider to the left. Pocket PCs: To increase the volume, move the slider up. To decrease the volume, move the slider down.
Voice Mute (Pocket PCs)	Tap to mute the phone's microphone for privacy. Tap again to unmute.

Outgoing Calls

To initiate a call:

1. Connect a headset to the card, if one is not already connected.
2. If the keypad is not displayed, then:

   Notebook PC: click the keypad button.

   Pocket PC: tap **Tools** > **Voice**.
3. Enter the number you want to dial by either clicking the number buttons on the keypad or typing the numbers on your keyboard.
4. Click the **TALK** button.

Note: You cannot make a phone call when there is an active PCS Vision connection.

Tip: If you click the TALK button without entering a number, the card redials the last number you dialed.

As the call is being dialed, the PCS Connection Manager displays "Connecting" and the phone number (or the name of the person whom you are dialing, if listed in your Phone Book).

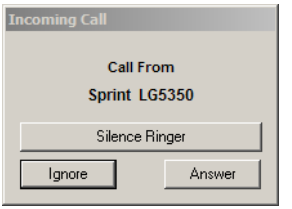
Once the call is answered, "Connected" is displayed.

You can also dial a number from the Phone Book (see page 88 for notebook PCs and page 89 for Pocket PCs) and from the Connection History (notebook PCs) or History (Pocket PCs) (see page 91).

Incoming Calls

When you receive an incoming call:

- A sound (ringer) is played.
- If you have Caller ID, the phone number and, if available, the name of the caller are displayed.



Tip: The Sound window, displayed when you select **MENU > Settings** > **Sound**, allows you to customize the sound played when you receive an incoming call. (See page 54.)

Note: If an incoming call occurs while you have a data connection, your caller will get a busy signal or be put through to your voicemail box.

To answer a call:

1. If one is not already connected, connect a headset to the PCS Connection Card by inserting the headset pin into the receptor on the edge of the card (near the LED).
2. Click **Answer** from the Incoming Call window or click the **TALK** button from the keypad view.

   The message area displays "Connected" and shows the duration of the call.

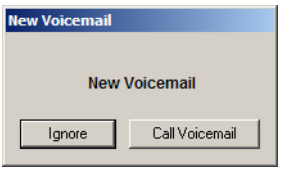
Tip: You can tap any key except **END** or **BACK** to answer the incoming call. On the Pocket PC, you can also use any of the four application buttons. On the notebook PC, you can also use keys on your keyboard: A through Z, 0 through 9 and the * or # key.

Voicemail

Incoming calls may be put through to your voicemail box, if:

- A calls arrives while you have a data connection, or
- You do not answer an incoming voice call

When you have new voicemail, a pop-up dialog appears:



To retrieve your voicemail:

- Click or press the "**1**" key and click **TALK**.

Menu Options

In This Section

- Overview of Menu Items
- Description of Menu Items

This chapter provides an overview and brief description of each menu option you may encounter while using your PCS Connection Card™ and PCS Connection Manager℠ Software.

Overview of menu items

The following table outlines the various menu items and provides a brief description and directions on where in this guide to find more detailed information about the item.

Menu Items

Menu item	Description	For more information, see:
Go (Connect)	Establish a data connection.	Page 73
Change Password	Change the password you use to allow access to the PCS Connection Card.	Page 87
Activation Wizard (notebook PC) **Activation (Pocket PC)**	Configure the card to use your account.	Page 87
Phone Book	Store phone numbers and email addresses of people you are in frequent contact with.	Page 88
Message Reader	Read Web messages sent to you.	Page 90
Alert Log	View information on card errors or failures by date/time, alert, connection name and type.	Page 91
Connection History (notebook PC) **History (Pocket PC)**	View information on outgoing and incoming calls and data connections by date/time, number dialed, type and duration.	Page 91
Device Info & Diagnostics (notebook PC) **Diagnostics (Pocket PC)**	View detailed information about the device, software and connections.	Page 93
Links	When connected to the enhanced Sprint Nationwide PCS Network, provides links to the PCS Web Site and the PCS Business Connection Web Site.	Page 93

Menu Items (Continued)

Menu item	Description	For more information, see:
Software Updates	Check for posted updates to the PCS Connection Manager Software or set to automatically check for updates.	Page 94
Settings	Configure the PCS Connection Manager Software to suit your needs and preferences.	Page 52
About PCS Connection Manager (notebook PC) **About... (Pocket PC)**	View the opening PCS Connection Manager identification screen.	Page 93
Close	Close the card software.	

Change Password

This menu option allows you to change the password used to allow access to the PCS Connection Card. To change your PCS Connection Card password, you must first change it online at www.sprintpcs.com. Once you have changed your online password, simply select **MENU > Change Password** (notebook PC) or **Tools > Change Password** (Pocket PC) and enter the new password.

Activation Wizard...

The Activation Wizard is used to configure the PCS Connection Card to use your account. An overview of this process is provided on page 12. Specific instructions on using the Activation Wizard begin on page 24.

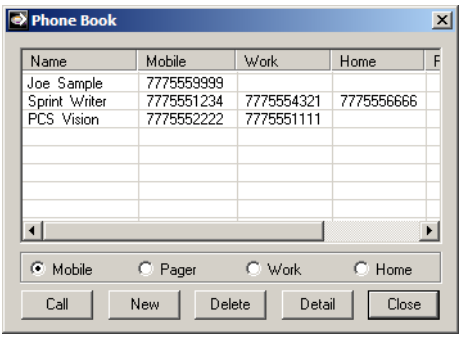
Phone Book (Notebook PC)

The phone book provides a place to store the phone numbers and email addresses of your contacts. The phone book allows you to easily call or email frequent contacts without having to enter the phone numbers and email addresses each time.

The number of phone book entries you may enter is limited only by the amount of storage space available on your computer.

To open the phone book:

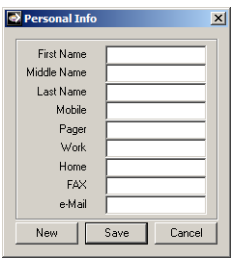
- Select **MENU > Phone Book**.

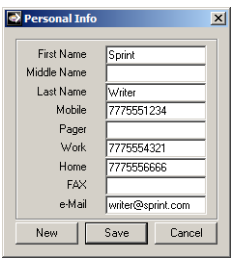


Adding a Record to the Phone Book

To add a record to the phone book:

1. In the Phone Book window, select **New**.
2. In the Personal Info window, enter the person's name and phone numbers and/or email addresses.
3. Click **Save**.





Changing a Record

To change a record:

1. Select the record in the Phone Book window.
2. Click **Details**.
3. Make any changes in the Personal Info window and click **Save** to keep the changes or **Cancel** to exit without saving the changes.

Deleting a Record

To delete a record:

1. Select the record in the Phone Book window.
2. Click **Delete**, or right-click the record and select **Delete Contact**.

Phone Book (Pocket PC)

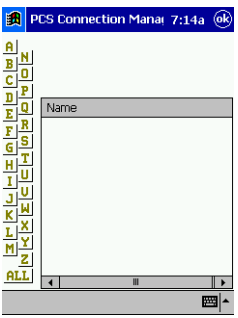
The phone book is an interface to the Contacts screen of the Pocket Outlook program. Any contact information you enter in Outlook is accessible through the phone book in the PCS Connection Manager Software. (You cannot add contact information directly to the phone book of the PCS Connection Manager for Pocket PC.)

The benefit of the phone book is that it saves you having to enter phone numbers of the people you regularly call each time you make a call.

The number of phone book entries is limited only by the amount of storage space available on your Pocket PC.

To open the phone book:

- Select **Tools > Phone Book**.



Message Reader

The Message Reader window is used to display Web messages you receive.

Note: For information about Web message service subscription, contact PCS Customer Service Solutions. Additional charges may apply.

Web messaging is a feature that allows you to receive short messages (up to 160 characters) through the CDMA network.

Reading Messages: The Inbox

Incoming messages are stored in the Inbox until you delete them or until they expire (depending on your settings in the Options window).

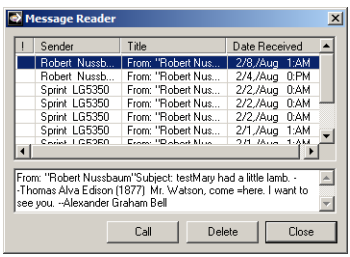
The Web message indicator notifies you when new messages arrive.

Tip: Messages marked with an exclamation point (!) have been tagged by the sender as being urgent or important.

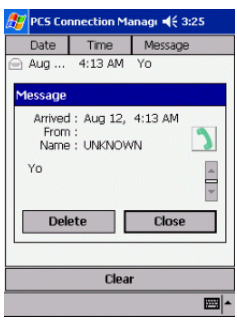
To read messages:

1. Select **MENU (Tools) >Message Reader** to display the Message Reader.

Notebook PC


Message Reader
! Sender Title Date Received
Robert Nussb... From: "Robert Nus... 2/8,/Aug 1:AM
Robert Nussb... From: "Robert Nus... 2/4,/Aug 0:PM
Sprint LG5350 From: "Robert Nus... 2/2,/Aug 0:AM
Sprint LG5350 From: "Robert Nus... 2/2,/Aug 0:AM
Sprint LG5350 From: "Robert Nus... 2/2,/Aug 0:AM
Sprint LG5350 From: "Robert Nus... 2/1,/Aug 1:AM
From: "Robert Nussbaum"Subject: testMary had a little lamb. --Thomas Alva Edison (1877) Mr. Watson, come =here. I want to see you. --Alexander Graham Bell
Call
Delete
Close

Pocket PC



The message header is displayed in the top of the screen, showing the address or phone number from which the message was sent, the beginning of the message, and the callback number.

2. Click the message header to display the message.

Unread messages are displayed in **bold** (Notebook PC) or as the Web message indicator (Pocket PC).

To delete messages:

1. Highlight the message(s) you want to delete.
2. Click **Delete** (notebook PCs) or **Clear** (Pocket PCs).
3. Confirm that you want to delete the message(s) by clicking **Yes**.

Exiting the Message Reader Window

To exit from the Message Reader window:

- (Notebook PCs) Click the **Close** box in the lower right corner of the window
- (Pocket PCs) Tap **ok** in the upper right corner

Alert Log

The Alert Log provides a record of all alerts that have been generated while establishing and maintaining your connections and settings. You can use the Alert Log to help isolate and resolve connection issues.

To display the Alert Log:

- Select **MENU > Alert Log**

To clear the Alert Log:

To delete all records in the Alert Log:

1. From the Alert Log window, click **Clear**.
2. You will see a prompt: "Clear all entries from the Alert Log?" Click **Yes** to delete all records. Click **No** to cancel.

Connection History

The Connection History maintains a record of your outgoing and incoming calls and data connections. In the Settings window (displayed when you select **MENU** > **Settings**) on the **General** tab, you can choose whether or not to keep a connection history.

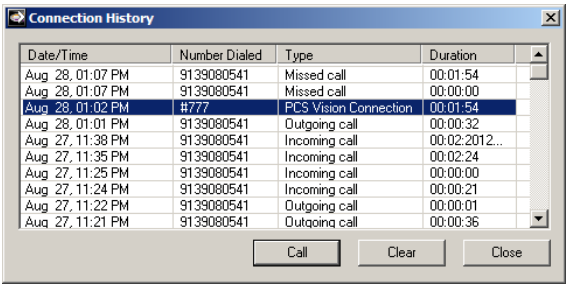
To enable or disable Connection History:

- Select **MENU > Settings > General > Keep Connection History**.

A check mark next to the option indicates that it is enabled.

To display the Connection History:

- Select **MENU** > **Connection History** (**Tools > History**)


Connection History
Date/Time
Number Dialed
Type
Duration
Aug 28, 01:07 PM 9139080541 Missed call 00:01:54
Aug 28, 01:07 PM 9139080541 Missed call 00:00:00
Aug 28, 01:02 PM #777 PCS Vision Connection 00:01:54
Aug 28, 01:01 PM 9139080541 Outgoing call 00:00:32
Aug 27, 11:38 PM 9139080541 Incoming call 00:02:2012...
Aug 27, 11:35 PM 9139080541 Incoming call 00:02:24
Aug 27, 11:25 PM 9139080541 Incoming call 00:00:00
Aug 27, 11:24 PM 9139080541 Incoming call 00:00:21
Aug 27, 11:22 PM 9139080541 Outgoing call 00:00:01
Aug 27, 11:21 PM 9139080541 Outgoing call 00:00:36
Call
Clear
Close

For each message, the Connection History displays:

- The date and time the connection was initiated
- The phone number of the caller (for incoming voice calls) or the phone number that you dialed (for outgoing voice calls and data connections)
- The type of connection (incoming call, outgoing call, missed call, PCS Vision Connection)
- The duration of the connection

Phoning a Number

To dial a phone number from Connection History:

1. Select the record that contains the number you wish to dial.
2. Click **Call**.

This option can be used to place voice calls only.

Deleting Records

To delete all records in the Connection History:

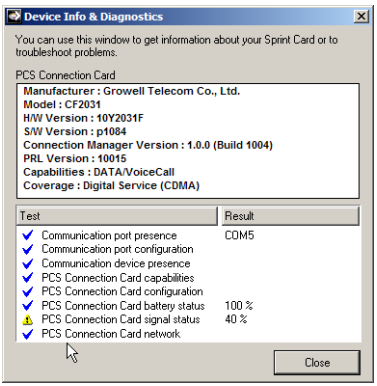
1. From the Connection History window, click **Clear**.
2. You will see a prompt: "Clear all entries from the Connection History?" Click **Yes** to delete all records. Click **No** to cancel.

Device Info & Diagnostics

The Device Info & Diagnostics window displays detailed information about your PCS Connection Card, PCS Connection Manager Software, signal strength, port configuration and more.

The information displayed in this window includes:

- The manufacturer
- PCS Connection Card model: CF2031
- The hardware version
- The version of software in use
- The PCS Connection Manager Software version and build
- The version of the PRL (Preferred Roaming List, which specifies the radio frequency channels that the card is permitted to use)
- The card's designed capabilities and coverage
- Various communication and card tests and results



Links

During an active PCS Vision connection, this menu option provides hyperlinks to the PCS Web site (www.sprintpcs.com) and the PCS Business Connection Web site (businessconnection.sprintpcs.com). To access links, select **MENU > Links > PCS Web Site** or **PCS Business Connection**.

Note: The PCS Connection Manager Links menu does not allow you to add or remove links. Continue to manage direct links to your favorite Web sites through your Web browser menu.

Software Updates

From time to time, Sprint may release updates for your PCS Connection Manager Software. These updates may add new features or improve the network performance. This menu option allows you to check for any posted updates or to set up an automatic monthly check for updates.

To check for software updates:

- Select **MENU > Software Updates > Check Now**.

To enable or disable automatic monthly checks:

- Select **MENU > Software Updates > Check for updates once a month**.

A check mark next to the option indicates that it is enabled. Click **OK** to save changes and exit the Software Updates dialog box.

Settings

The PCS Connection Manager Settings menu allows you to configure a variety of general and advanced settings for your PCS Connection Manager Software. For complete details on the Settings options, see ‘PCS Connection Manager Settings” on page 52

Always on Top (Notebooks Only)

When **Window always on top** is enabled, the PCS Connection Manager displays in front of all other application windows, even when you position another window over the manager. This allows you to view connection status indicators while using another application, such as your Internet browser.

To enable or disable Always on Top:

- Select **MENU > Settings > General > Window always on top**.

A check mark next to the option indicates that it is enabled.

About PCS Connection Manager

The About PCS Connection Manager menu option allows you to display the PCS Connection Manager opening splash screen, which appears when you launch the PCS Connection Manager Software.

- Select **MENU > About PCS Connection Manager** (**Tools > About...**).

Troubleshooting Tips (Notebook PC)

In This Section

- Problem Causes and Solutions
- Locating the Existing Driver
- Resolving Resource Conflicts
- Additional Troubleshooting Tools

This section provides assistance in diagnosing and solving many common problems you may experience while using your PCS Connection Card™ with your notebook PC.

Problem Causes and Suggestions

When properly installed, the PCS Connection Card is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- System resources required by the card are in use by other devices.
- Network coverage is not available (either because you are outside the coverage area, or because of an account or network problem).

This section describes how to diagnose and solve these and other problems. If, after reading this section, you are unable to resolve a problem, please visit www.sprintpcs.com or contact PCS Customer Service Solutions at 1-888-211-4PCS (4727).

Error: Searching for PCS Connection Card...

The PCS Connection Manager℠ Software displays this message: "**Searching for PCS Connection Card….**"

Possible Causes	Suggestions
a. The card is not completely inserted into the PC Card slot. **b.** The wrong driver is installed for the card. **c.** There is a resource conflict.	**a.** Eject and reinsert the card. **b.** See "Reinstalling the PCS Connection Card Driver" on page 99. **c.** See "Resolving Resource Conflicts" on page 103.

Error: Splash Screen is Frozen

The splash screen of the PCS Connection Manager Software is frozen.

Possible Causes	Suggestions
• If you are unable to resolve this problem by restarting your PC, you may have a resource conflict.	• See "Resolving Resource Conflicts" on page 103.

Error: Not In Service

The PCS Connection Manager Software displays the message "Not in service."

Possible Causes	Suggestions
Inadequate signal strength may occur for any of these reasons: **a.** You are outside the enhanced Sprint Nationwide PCS Network. **b.** Your antenna is not attached or is pointed in the wrong direction. **c.** You may be inside a building or near a structure that is causing radio interference.	**a.** Verify that you are within the enhanced Sprint Nationwide PCS Network. Coverage maps are available at www.sprintpcs.com. **b.** Ensure your antenna is properly attached and is perpendicular to the card. Re-orient your antenna. **c.** Change your location.

Error: Not able to prepare data services (Windows 98SE and 2000)

The PCS Connection Manager Software displays the message "Unable to prepare data services."

Possible Causes	Suggestions
• You need to perform the high-security 128-bit upgrades required for IOTA execution.	• Perform upgrades as described in the release notes. Upgrades may be downloaded from: Windows 98SE upgrade to IE6 installation: http://www.microsoft.com/windows/ie/downloads/ie6/default.asp Windows 2000 High Encryption Pack: http://www.microsoft.com/windows2000/downloads/recommended/encryption/default.asp

Error: Connection Gets Dropped (Windows 2000 and XP)

When attempting a data connection with PCS Connection Manager, the connection gets dropped as soon as it is established (the status goes from "Connecting" and "Connected" back to "Click GO to Connect").

Possible Causes	Suggestions
• The connection properties are not optimal.	**1.** Windows XP: Click **Start** > **Connect To** > **PCS Vision Connection**. Windows 2000: Click **Start** > **Settings** > **Network and Dial-Up Connections** > **PCS Vision Connection**. **2.** In the window that appears, click **Properties**. **3.** Click the **Networking** tab. **4.** Click **Settings**. **5.** Ensure that **Enable LCP Extensions** and **Negotiate multi-link for single link connections** are not selected. **6.** Click **OK**.

Reinstalling the PCS Connection Card Driver

There is a PCS Connection Card driver for each supported Windows operating system. Unless the appropriate driver for your version of Windows is installed, you will not be able to establish a network connection with the card. This section provides instructions on verifying that you have the correct card driver installed.

Note: You must have the PCS Connection Card installation CD to complete this procedure.

Windows 98SE

To verify that the correct driver is installed:

- Locate the existing driver

Locating the Existing Driver

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double click the **System** icon.
3. Click the **Device Manager** tab.
4. Locate the PCS Connection Card entries by using the "+" signs to expand the listings. (For example, to see all the installed modems, click the "+" sign to the left of **Modems**.) The card should have 3 entries:

- The card should display under **Multifunction adapters** as **Sprint CF2031 Modem Parent**.
- The card should display under **Modems** as **Sprint CF2031 Modem**.
- The card should display under **Network adapters** as **Sprint CF2031 Modem Adapter**.

If the listings above do not appear, identify the listing for the PCS Connection Card by ejecting the card. This causes the driver listing for the card to disappear from the list. Reinsert the card again to cause the driver listing to reappear. You can identify the entries for the PCS Connection Card by observing which entries are affected when you eject and reinsert the card.

Windows 2000

To verify that the correct driver is installed:

- Locate the existing driver

Locating the Driver

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. If the card is not already inserted into your PC Card slot, insert it.
3. Double click the **System** icon.
4. Click the **Hardware** tab.
5. Click the **Device Manager...** button.
6. Locate the PCS Connection Card entries by using the "+" signs to expand the listings. (For example, to see all the installed modems, click the "+" sign to the left of **Modems**.) The card should have 3 entries:

- The card should display under **Multifunction adapters** as **Sprint CF2031 Modem Parent**.
- The card should display under **Modems** as **Sprint CF2031 Modem**.
- The card should display under **Network adapters** as **Sprint CF2031 Modem Adapter**.

If the listings above do not appear, identify the listing for the PCS Connection Card by ejecting the card. This causes the driver listing for the card to disappear from the list. Reinsert the card again to cause the driver listing to reappear. You can identify the entries for the PCS Connection Card by observing which entries are affected when you eject and reinsert the card.

Windows Me

To verify that the correct driver is installed:

- Locate the existing driver

Locating the Existing Driver

1. Open the Control Panel by selecting **Start > Settings > Control Panel**.
2. If the System icon is not in the window, **view all Control Panel options**.
3. Double click the **System** icon.
4. Click the **Device Manager** tab.
5. Locate the PCS Connection Card entries by using the "+" signs to expand the listings. (For example, to see all the installed modems, click the "+" sign to the left of **Modems**.) The card should have 3 entries:

- The card should display under **Multifunction adapters** as **Sprint CF2031 Modem Parent**.
- The card should display under **Modems** as **Sprint CF2031 Modem**.
- The card should display under **Network adapters** as **Sprint CF2031 Modem Adapter**.

If the listings above do not appear, identify the listing for the PCS Connection Card by ejecting the card. This causes the driver listing for the card to disappear from the list. Reinsert the card again to cause the driver listing to reappear. You can identify the entries for the PCS Connection Card by observing which entries are affected when you eject and reinsert the card.

Windows XP

To verify that the correct driver is installed:

- Locate the existing driver

Locating the Existing Driver

1. Open the Control Panel by selecting **Start > Control Panel**.
2. If "Pick a category" is displayed, select **Switch to Classic View**.
3. Double click the **System** icon.
4. Click the **Hardware** tab.
5. Click the **Device Manager** button.
6. Locate the PCS Connection Card entries by using the "+" signs to expand the listings. (For example, to see all the installed modems, click the "+" sign to the left of **Modems**.) The card should have 3 entries:

- The card should display under **Multifunction adapters** as **Sprint CF2031 Modem Parent**.
- The card should display under **Modems** as **Sprint CF2031 Modem**.
- The card should display under **Network adapters** as **Sprint CF2031 Modem Adapter**.

If the listings above do not appear, identify the listing for the PCS Connection Card by ejecting the card. This causes the driver listing for the card to disappear from the list. Reinsert the card again to cause the driver listing to reappear. You can identify the entries for the PCS Connection Card by observing which entries are affected when you eject and reinsert the card. Right click **Sprint CF2031 Modem Parent** (or the PCS Connection Card listing under **Multifunction adapters**) to display a pop-up menu.

Resolving Resource Conflicts

Note: Your PCS Connection Card installation CD is required to complete this procedure.

The PCS Connection Card requires these system resources:

- 1 IRQ
- 32 bytes of I/O space
- 1 available communications port

If these resources are not available to the card, you have a resource conflict. If another PC Card is installed, you may be able to free the necessary resources simply by ejecting the other card. Otherwise, you may need to disable another device (such as an internal modem, infrared device, or network card) to resolve the conflict. This section explains how to disable other devices.

Windows 98SE

To resolve a resource conflict in Windows 98SE:

- Disable a device (internal modem, infrared device, or network card)

Disabling an Internal Modem, Infrared Device, or Network Card

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double click the **System** icon.
3. Click the **Device Manager** tab.
4. Locate the device that you want to disable:

- If you want to disable an internal modem, expand the **Modem** tree by clicking the "+" sign to its left. Double click the internal modem that you wish to disable.
- If you want to disable an infrared device, expand the **Infrared Devices** tree by clicking the "+" sign to its left. Double click the infrared device that you wish to disable.
- If you want to disable a network card, expand the **Network Adapters** tree by clicking the "+" sign to its left. Double click the network card you wish to disable.

5. In the window that appears, in the Device Usage section, click the check box labeled **Disable in this hardware profile** so that the box is checked, and click **OK**.

Windows 2000

To resolve a resource conflict in Windows 2000:

- Disable a device (internal modem, infrared device, or network card

Disabling an Internal Modem, Infrared Device, or Network Card

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double click the **System** icon.
3. Click the **Hardware** tab.
4. Click the **Device Manager** button.
5. Locate the device that you want to disable:

- If you want to disable an internal modem, expand the **Modem** tree by clicking the "+" sign to its left.
- If you want to disable an infrared device, expand the **Infrared Devices** tree by clicking the "+" sign to its left.
- If you want to disable a network card, expand the **Network Adapters** tree by clicking the "+" sign to its left.

6. Right click the device you want to disable, choose **Disable** from the pop-up menu that appears and click **OK**.

Windows Me

To resolve a resource conflict in Windows Me:

- Disable a device (internal modem, infrared device, or network card)

Disabling an Internal Modem, Infrared Device, or Network Card

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. If the System icon is not in the window, click **view all Control Panel options**.
3. Double click the **System** icon.
4. Click the **Device Manager** button.
5. Locate the device that you want to disable:

- If you want to disable an internal modem, expand the **Modem** tree by clicking the "+" sign to its left.
- If you want to disable an infrared device, expand the **Infrared Devices** tree by clicking the "+" sign to its left.
- If you want to disable a network card, expand the **Network Adapters** tree by clicking the "+" sign to its left.

6. Click to select the device you want to disable, and the **Properties** button.
7. Click to check the **Disable in this hardware profile** check box in the Device usage section of the window and click the **OK** button.

Windows XP

To resolve a resource conflict in Windows XP:

- Disable a device (internal modem, infrared device, or network card)

Disabling an Internal Modem, Infrared Device, or Network Card

1. Close all Windows programs and open the Control Panel by selecting **Start > Settings > Control Panel**.
2. Double click the **System** icon.
3. Click the **Hardware** tab.
4. Click the **Device Manager** button.
5. Locate the device that you want to disable:

- If you want to disable an internal modem, expand the **Modem** tree by clicking the "+" sign to its left.
- If you want to disable an infrared device, expand the **Infrared Devices** tree by clicking the "+" sign to its left.
- If you want to disable a network card, expand the **Network Adapters** tree by clicking the "+" sign to its left.

6. Right click the device you want to disable, choose **Disable** from the pop-up menu that appears and click **OK**.

Additional Troubleshooting Tools

Connection History

Connection History provides you with a detailed record of the connections established using your PCS Connection Card. Since Connection History allows you to sort records by connection name, you can easily distinguish between personal and business usage.

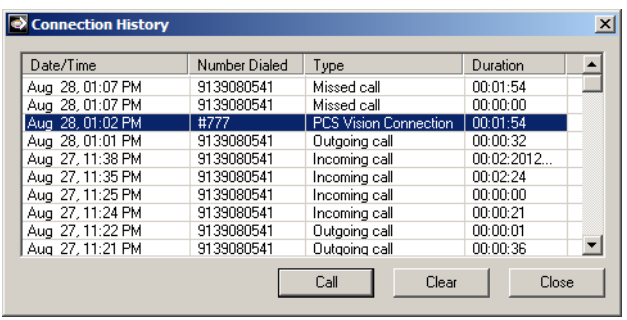
Accessing Connection History

Select **Connection History** from the Menu on the PCS Connection Manager interface.

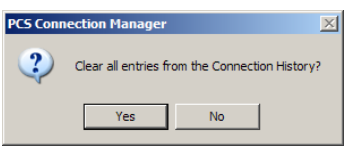
About Connection History

The Connection History window displays a table with four columns: Date/Time, Number Dialed, Type and Duration. The "Type" column will label the connection as "PCS Vision Connection," "Incoming Call," "Outgoing Call," or "Missed Call."

You can select entries by using the arrow keys or your mouse. Selected entries are highlighted. By default, no entry is selected.


Connection History
Date/Time
Number Dialed
Type
Duration
Aug 28, 01:07 PM 9139080541 Missed call 00:01:54
Aug 28, 01:07 PM 9139080541 Missed call 00:00:00
Aug 28, 01:02 PM #777 PCS Vision Connection 00:01:54
Aug 28, 01:01 PM 9139080541 Outgoing call 00:00:32
Aug 27, 11:38 PM 9139080541 Incoming call 00:02:2012...
Aug 27, 11:35 PM 9139080541 Incoming call 00:02:24
Aug 27, 11:25 PM 9139080541 Incoming call 00:00:00
Aug 27, 11:24 PM 9139080541 Incoming call 00:00:21
Aug 27, 11:22 PM 9139080541 Outgoing call 00:00:01
Aug 27, 11:21 PM 9139080541 Outgoing call 00:00:36
Call
Clear
Close

Click the **Clear** button to access the Clear Connection History dialog box. Click **Yes** to confirm the delete or **No** to cancel.



Alert Log

The Alert Log provides a record of all alerts that have been received while establishing and maintaining your connections. You can use the Alert Log to help isolate and resolve connection issues.

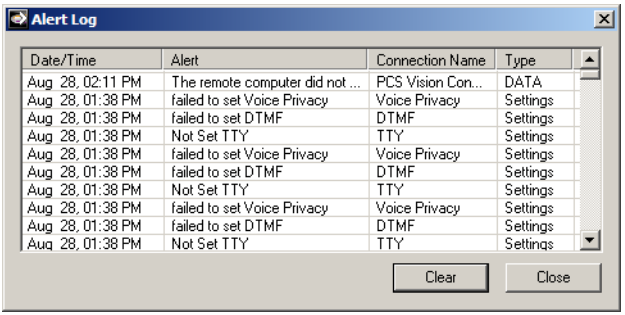
Accessing Alert Log

On the PCS Connection Manager interface click **Menu**. Select **Alert Log** from the submenu.

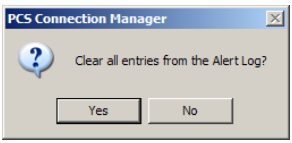
About Alert Log

The Alert Log displays a table with four columns: Date/Time, Alert, Connection Name and Type.

You can select entries by using the arrow keys on your keyboard or the mouse. Selected entries are highlighted. By default, no entry is selected.



Click the **Clear** button to access the Clear Alert Log dialog box. Click **Yes** to confirm the delete or **No** to cancel.



Device Info & Diagnostics

Device Info & Diagnostics can help identify problems associated with connecting to the enhanced Sprint Nationwide PCS Network. Device Info & Diagnostics evaluates issues with your USB port, port configuration, PCS Connection Card signal strength, battery status, the enhanced Sprint Nationwide PCS Network and more. Once the program runs a diagnostics check it can recommend possible solutions.

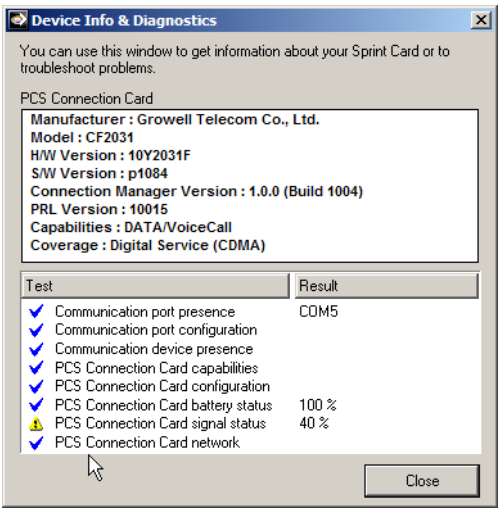
Accessing Diagnostics

From the PCS Connection Manager interface, click **Menu**, then select **Device Info & Diagnostics** from the submenu.

About Device Info & Diagnostics

The Device Info & Diagnostics dialog box allows you to select a number of ways to troubleshoot or obtain more information about your PCS Connection Card:

- The tests automatically execute when the window opens.



Troubleshooting Tips (Pocket PCs)

In This Section

- **Problem Causes and Suggestions**
- **Uninstalling the PCS Connection Manager℠ Software**
- **Additional Troubleshooting Tools**

This section provides assistance in diagnosing and solving many common problems you may experience while using your PCS Connection Card™ with your Pocket PC.

Problem Causes and Suggestions

When properly installed, the PCS Connection Card is a highly reliable product. Most problems are caused by one of these issues:

- The wrong driver has been installed.
- Network coverage is not available (either because you are outside the coverage area, or because of an account or network problem).

This section describes how to diagnose and solve these and other problems. If, after reading this section, you are unable to resolve a problem, please visit www.sprintpcs.com or contact PCS Customer Service Solutions at 1-888-211-4PCS (4727).

Error: ActiveSync® Does Not Prompt that There is Software to Download

You have installed the PCS Connection Manager℠ Software to the host and connected the Pocket PC to the host. ActiveSync® launches but does NOT prompt that there is software to download, so you are unable to complete the installation process.

Possible Causes	Suggestions
There was a failure in the host installation process or ActiveSync has failed to detect that there is software to download.	Uninstall the software and start the installation process again. For instructions, see "Uninstalling the PCS Connection Manager Software" on page 114.

Error: Searching for PCS Connection Card...

The PCS Connection Manager Software displays the message "**Searching for PCS Connection Card….**"

Possible Causes	Suggestions
a. The card is not completely inserted into the PC Card slot. **b.** The wrong driver is installed for the card. **c.** The battery of your Pocket PC or its expansion pack is low.	**a.** Eject and reinsert the card. **b.** Uninstall the PCS Connection Card Software and reinstall it. For instructions on removing the software, see 'Uninstalling the PCS Connection Manager Software" on page 114. To reinstall the software, see "Installing the PCS Connection Manager Software" on page 33. **c.** Ensure your Pocket PC and its expansion pack are fully charged.

Error: Not able to prepare data services

The PCS Connection Manager Software displays the message "Unable to prepare data services."

Possible Causes	Suggestions
• You need to perform the high-security 128-bit upgrades required for IOTA execution.	• Perform upgrades as described in the release notes. Upgrades may be downloaded from: Pocket PC High Encryption Pack: http://www.microsoft.com/mobile/pocketpc/downloads/ssl128.asp

Error: Not In Service

The PCS Connection Manager displays the message "**Not in service**."

Possible Causes	Suggestions
Inadequate signal strength may occur for any of these reasons: **a.** You are outside the enhanced Sprint Nationwide PCS Network. **b.** Your antenna is not attached or is pointed in the wrong direction. **c.** You may be inside a building or near a structure that is causing radio interference.	**a.** Verify that you are within the enhanced Sprint Nationwide PCS Network. Coverage maps are available at www.sprintpcs.com. **b.** Ensure your antenna is properly attached. Re-orient your antenna. **c.** Change your location.

Uninstalling the PCS Connection Manager Software

To uninstall the PCS Connection Manager Software from the host PC:

1. If your Pocket PC is connected to the host, disconnect it.
2. On the host, open the Control Panel by selecting **Start > Settings > Control Panel**.
3. Double click the **Add/Remove Programs** icon to open the Add/Remove Programs window.
4. Click to select **PCS Connection Manager**.
5. Double click the **Add/Remove** button.
6. Confirm that you want to delete the program by clicking **OK**.
7. Click **Finish**.

To remove the software from a Pocket PC:

1. Eject the PCS Connection Card if it is inserted in your PCMCIA jacket (and the jacket is attached).
2. Tap **Start > Settings**.
3. Tap the **System** tab.
4. Tap the **Remove Programs** icon.
5. Tap **PCS Connection Manager** and tap the **Remove** button.
6. Confirm that you want to remove the program by tapping **Yes**.

Additional Troubleshooting Tools

Connection History

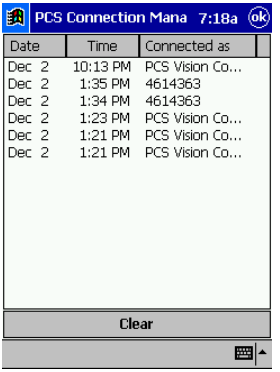
Connection History provides you with a detailed record of the connections established using your PCS Connection Card. Since Connection History allows you to sort records, you can easily distinguish between personal and business usage.

Accessing Connection History

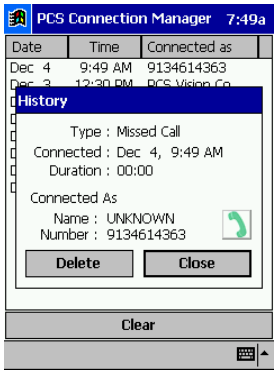
Select **Tools > History** from the PCS Connection Manager interface.

About Connection History

The Connection History window displays a table with three columns: Date, Time and Connected as.


PCS Connection Mana 7:18a
ok
Date
Time
Connected as
Dec 2 10:13 PM PCS Vision Co...
Dec 2 1:35 PM 4614363
Dec 2 1:34 PM 4614363
Dec 2 1:23 PM PCS Vision Co...
Dec 2 1:21 PM PCS Vision Co...
Dec 2 1:21 PM PCS Vision Co...
Clear

You can choose to view details about a particular item in the Connection History by tapping on the item.



The History Details window provides further information about the selected connection, including connection type and duration and name of the connection.

Note: Tapping **Delete** in the History Details window erases the entry from the History without displaying a confirmation dialog and closes the window.

Alert Log

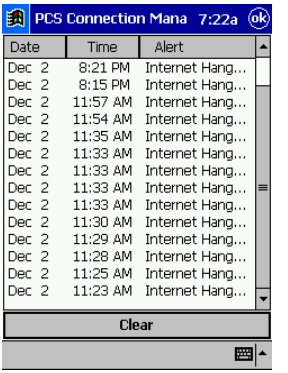
The Alert Log provides a record of all alerts that have been received while establishing and maintaining your connections. You can use the Alert Log to help isolate and resolve connection issues.

Accessing Alert Log

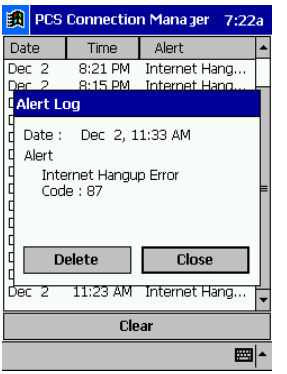
On the PCS Connection Manager interface select **Tools > Alert Log**.

About Alert Log

The Alert Log displays a table with three columns: Date, Time and Alert.


PCS Connection Mana 7:22a
ok
Date
Time
Alert
Dec 2 8:21 PM Internet Hang...
Dec 2 8:15 PM Internet Hang...
Dec 2 11:57 AM Internet Hang...
Dec 2 11:54 AM Internet Hang...
Dec 2 11:35 AM Internet Hang...
Dec 2 11:33 AM Internet Hang...
Dec 2 11:33 AM Internet Hang...
Dec 2 11:33 AM Internet Hang...
Dec 2 11:33 AM Internet Hang...
Dec 2 11:30 AM Internet Hang...
Dec 2 11:29 AM Internet Hang...
Dec 2 11:28 AM Internet Hang...
Dec 2 11:25 AM Internet Hang...
Dec 2 11:23 AM Internet Hang...
Clear

Tap **Alert** to open and view the Alert Details dialog box. For common errors, troubleshooting steps are provided in the Alert text.



Close will close the dialog. **Delete** will delete the alert from the log with no confirmation and close the dialog.

Diagnostics

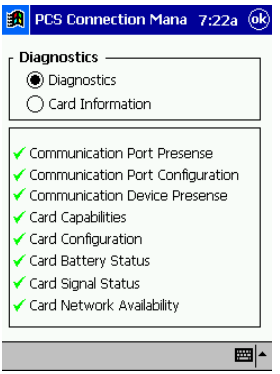
Diagnostics can help identify problems associated with connecting to the enhanced Sprint Nationwide PCS Network. Diagnostics evaluates issues with your USB port, port configuration, PCS Connection Card signal strength, battery status, the enhanced Sprint Nationwide PCS Network and more. Once the program runs a diagnostics check it can recommend possible solutions.

Accessing Diagnostics

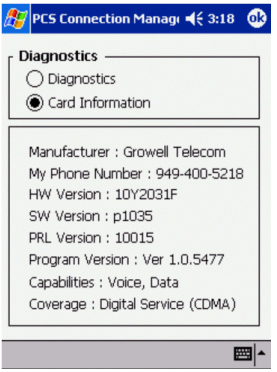
Select **Tools > Diagnostics**.

About Device Info & Diagnostics

The Diagnostics dialog box allows you to select a number of ways to troubleshoot or obtain more information about your PCS Connection Card:



You may also tap **PCS Connection Card Information** to view details about your PCS Connection Card.



PCS Vision℠

PCS Vision℠

In This Section

- Web
- Messaging
- PCS Business Connection℠

PCS Vision™ brings you clarity you can see and hear, with enhanced, always-on mobile multimedia capabilities like email, Internet browsing and PCS Business Connection℠ that are easy to learn and use. This rich, colorful graphic experience will be visually comparable to your home or office computer. It's a revolutionary way to look at wireless.

Web

Launching the Web

To launch the Web:

1. Verify that the PCS Connection Card is inserted correctly into your computer's Type II PC Card slot or Type II Compact Flash slot.
2. Launch the PCS Connection Manager application.

- Double-click the **PCS Connection Manager** icon on your desktop.

– or –

- Select **Start > Programs > Sprint CF2031 > PCS Connection Manager**.

(To launch the PCS Connection Manager on your Pocket PC, select **Start** > **PCS Connection Manager.**)

3. Click the **GO** button to launch your PCS Vision Connection.
4. Once your PCS Vision Connection is established, you may launch your browser application such as Internet Explorer or Netscape Navigator.

Your User Name

When you buy a PCS Connection Card and sign up for service, you're automatically assigned a User name. Then, when you use PCS Vision Services, your User name is submitted to identify you to the Sprint Nationwide PCS Network. The User name is also useful as an address for email and instant messaging, as a way to personalize Internet services, and as an online virtual identity.

A User name is typically based on the customer's name and a number, followed by "@sprintpcs.com." For example, the third John Smith to sign up for PCS Vision Services might have jsmith003@sprintpcs.com as his User name. If you want a particular User name, you can visit www.sprintpcs.com and get the name you want – as long as nobody else has it!

Note: If you already have a PCS Mail User name, that will automatically become your PCS Vision User name.

Your User name will be automatically programmed into your PCS Connection Card. You don't have to enter it.

Messaging

Now you can send and receive email and instant messages, as well as chat on select PCS Connection Cards. With chat, you can have a conversation without talking. Join in a Web-based chat room to exchange information on a specific topic or read conversations that others have posted – even launch a one-on-one chat for a more in-depth conversation.

Messages

PCS Messages appear on your screen as **Page/Text** and include numeric messages, Messages, Updates, and Mail.

Signing Up for Updates

With Updates, you can have news and information sent directly to your PCS Connection Card at the times you choose.

To select the information you want sent to your card:

1. From your computer, log on to the Internet.
2. Go to the site from which you want to receive information. A few of the sites you can visit are America Online®, Yahoo!®, MSN® and eBay®. (The location where you request updates within each site will vary.)
3. Where indicated on the site, input your PCS Connection Card's 10-digit PCS Phone Number followed by "@messaging.sprintpcs.com." For example: 5551234567@messaging.sprintpcs.com.

Upon completing the registration process, you should begin receiving updates on your PCS Connection Card as requested.

Email

Using Email

With Email, you can set up an account at no additional charge and perform many of the typical email functions from your PCS Phone that you can from your personal computer.

You can manage your Email Account from your PCS Phone or personal computer at www.sprintpcs.com. You can also access other select email providers from the Web.

Accessing Email Messages

To access Email Messages:

1. From the Web home page, select the **Messaging** folder.
2. From the Messaging folder, select **Email**. If you're a first-time user, prompts will help you set up your email account by establishing a User name and password.
3. To view your messages, select **Inbox**.
4. Select the message you wish to read.
5. Once you've read a message, use the quick actions at the end of each message (**Erase**, **Reply**, **Reply All** or **Next Message**) or select **Menu** for a full list of options.

Composing Email Messages

To compose a Email Message:

1. From the Web home page, select the **Messaging** folder.
2. Select **Email**.
3. Select **Compose**.
4. Select **Add Name** to enter the address of the person to whom you're sending a message.
5. Select **Next** to enter the subject of your email and your specific message.
6. Select **Send** when your message is ready to be delivered.

PCS Business Connection℠ Personal Edition

PCS Business Connection℠ Personal Edition is designed to offer secure wireless access to both Microsoft Outlook and Lotus Notes.

PCS Business Connection Personal Edition delivers the following features:

- **Business email access**: Read, reply to, forward, delete and compose your company email.
- **Company directory and contacts**: Search, view, call, and email contacts from your company's directory. Do all this and add/edit your personal contacts.
- **Work calendar**: Accept and reject meetings, view daily summaries and details, navigate to various dates.
- **Files/information on your PC**: Browse folders, download and view documents from any device using a PC browser or Pocket Internet Explorer.

To use PCS Business Connection Personal Edition, install Business Connection Personal Edition software on your work PC. This allows data to be securely retrieved in real-time by your wireless device when connected to the Sprint Nationwide PCS Network. There is a monthly charge for PCS Business Connection, and usage charges will also apply.

When your work PC isn't on, you can share connections with your co-workers so that you always have access to your email, calendar and contacts. Your data remains secure behind the company firewall and any changes you make on your wireless device are instantly updated on your company server without the need to synchronize.

Additional Business Connection solutions are available to your company. For more details, visit businessconnection.sprintpcs.com.

PCS Vision FAQs

How will I know when my PCS Connection Card is ready for PCS Vision Service?
Your User name (for example, bsmith001@sprintpcs.com) will appear on the display screen.

How do I sign-in for the first time?
You are automatically signed in to PCS Vision Services when you launch the PCS Connection Manager.

How do I know when my PCS Connection Card is connected to PCS Vision Services?
Your card automatically connects when PCS Vision Service is used or an incoming message arrives.

Can I make calls and use PCS Vision Services at the same time?
You cannot use voice and data services simultaneously. If you receive a call during a data session, the call will be forwarded to your voicemail box.

When is my data connection active?
Your connection is active when data is being transferred. Incoming calls go directly to voicemail. When active, the green status icon ( ) appears in the system tray on the lower left corner of your display screen.

When is my data connection dormant?
If no data is received for a period of time, the connection goes dormant. If no data is received for a long time, the connection will terminate.

Can I sign out of data services?
You can sign out without turning off your card, however you will not be able to browse the Web or use other PCS Vision Services. You may sign in again at any time.

How can I optimize my settings to achieve faster speeds and send and receive less data while dialing into my company network?
For optimized results, work in "Offline" mode and synchronize periodically to send and receive company email. Also, save/drag-and-drop attachments to a desktop folder rather than double-clicking prior to opening. For more detailed information, access the Microsoft whitepaper at http://www.microsoft.com/office/outlook/evaluation/perform.doc.

Technical Specifications and Regulatory Information

Technical Specifications

In This Section

- Environmental Specifications
- Hardware Specifications
- Software Specifications
- Transmitter & Receiver Specifications
- Mechanical Specifications

This section outlines the environmental and technical specifications of your new PCS Connection Card.

Environmental Specifications

Environmental Specifications

Operating temperature	-20 to +50 °C (ambient, outside PCMCIA enclosure)
Storage temperature	-30 to +60 °C
Humidity	TIA/EIA IS-98-D
Vibration Stability	1.5G from 5 to 500 Hz (The rate of 0.1 octaves/second in the three orthogonal axes.)
Drop	1 meter onto concrete surface (On each of six surfaces, the CF2031 meets all electrical specifications with no mechanical damage.)
Contact Discharge (Level 2)	± 4kV (IEC 6100-4-2)
Air Discharge (Level 3)	± 8kV (EN50082-1)

Hardware Specifications

Hardware Specifications

Interface Type	Compact Flash Type II
Common Air Interface	CDMA 1xRTT
Channel Spacing	50KHz
Chip set	MSM 5105
IF Receiving Chip	IFR3000 / S1M8656A
IF Transfer Chip	RFT3100
Baud Rate	Default: 230,400 bps (changeable)
Transmitting (Max. Data Rate)	Forward Link: 153.6 kbps Reverse Link: 76.8 kbps
Supply Voltage	3.7V from CF battery pack 3.3V from CF (or PCMCIA) slot
Battery	900mAh
Charger (charging time)	Approximately 2.6 hours
Current Consumption: Sleep / Idle Average In-Use Max. (Peak)	 About 23mA / 135mA About 360mA (Tx: +5dBm, Rx: -78dBm) About 720mA (Tx: +23dBm, Rx: -106.5dBm)
Average In-Use Time	About 3.3 hours (Continuous talk time with 10dBm transmit power) About 36 hours (Standby mode)
Communication Ports	1 port
Voice Capability	Support

Software Specifications

Software Specifications

CDMA Specification	1xRTT Applied
Data Service	IS-707A, IS-707A-1
SMS (IS-637)	MT (No MO)
FAX	n/a
IOTA	Support
OTASP (IS-683A)	Support
OTAPA (IS-683A)	n/a
PRL (preferred roaming list)	Support
Authentication	Support
Voice (8K EVRC, 13K QCELP)	Support
NAM	1 NAM
E911 & Position Location	Support (AFLT)
TTY/Accessibility	Support
Mobile IP	Support
WNP (Wireless Number Portability)	Support

Transmitter Specifications

Transmitter Specifications

Type of Multiplexing	Duplex
Normal Output Power	0.2 W
TX Max Power	Over 23dBm (Peak 25dBm)
Frequency Range	1851.25 ~ 1908.75 MHz
Frequency Stability	Under Defined Frequency ±150Hz
Bandwidth	1.25 MHz
Occupied Bandwidth	Under 1.32 MHz
Type of Oscillation	PLL Synthesizer
Local Oscillator Frequency	1720.87 ~ 1778.37 MHz
Intermediate Frequency	130.38 MHz
Modulation Method	OQPSK
Waveform Quality	Over 0.944
Conducted Spurious Emission	Over Carrier ±1.25 MHz, -42dBc/30KHz
Common RF Impedance	50 ohm

Receiver Specifications

Receiver Specifications

Type of Receiving	Super Heterodyne Method
Frequency Range	1931.25 ~ 1988.75 MHz
Bandwidth	1.25 MHz
Occupied Bandwidth	Under 1.32 MHz
Type of Oscillation	PLL Synthesizer
Local Oscillator Frequency	1720.87 ~ 1778.37 MHz
Intermediate Frequency	210.38 MHz
Modulation Method	QPSK
Receiver Sensitivity	-106.5dBm (FER = 0.5%) Except ch. 900 ~ 1199 (-104dBm)
Single Tone Desensitization	Under -101dBm (FER = 1%) at ±1.25MHz
Inter-modulation Spurious Response Attenuation	Under -101dBm (FER = 1%) at ±1.25MHz and ±2.05MHz (-43dBm)
Common RF Impedance	50 ohm

Mechanical Specifications

Mechanical Specifications

Dimensions (W x D x H)	42.8 x 60.4 x 16 mm
Weight	About 25.0 g (CF2031 + Battery Pack: about 89.5 g)
Battery Pack	Dimension: 42.0 x 97.4 (75.0) x 12.8 mm Weight: about 64.5 g (Net Battery Size: 35.5 x 53.0 x 7.2 mm; Weight: 31.0 g)
Power Button	Support (Push button - using a tact switch)
Headset Jack	Support
LED	CF Card LED: 1 LED Color: Dual (Green and Red) Charger LED: 1 LED Color: Dual (Green and Red)
Antenna	Shape: Extractable Length: 36 x 2 mm Gain: 0dBi Output impedance: 50 ohm

Miscellaneous

Miscellaneous

UI & Driver	PDA: Pocket PC / Pocket PC 2002 Notebook: Windows 98/ME/2000/XP
Accessories	CD-ROM (PCS Connection Manager, User's Guide) CF2031 Case Battery Pack for PCS Connection Card Start Here Guide PC Card Adapter AC Adapter
Certification & Approval	FCC Part 15 & 24, FCC SAR UL 1310 CDG (CDMA Development Group)

Regulatory Information

In This Section

- **Warning (EMI) - US FCC Information**
- **Warning (EMI) - Canada**

This section outlines important regulatory notices concerning your new PCS Connection Card™.

Regulatory Notices

This device complies with Part 15 & 24 of the FCC Rules. Operation of this device is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesirable operations.

FCC guidelines stipulate that the antenna should be more than 1.5 cm (0.6") from all persons.

FCC ID: PC6CF2031

Where appropriate, the use of the equipment is subject to the following conditions:

CAUTION Unauthorized modifications or changes not expressly approved by Sprint Communications Company L.P. could void compliance with regulatory rules, and thereby your authority to use this equipment.

WARNING (EMI) – United States FCC Information – This equipment has been tested and found to comply with the limits pursuant to Part 15 & 24 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in an appropriate installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

WARNING (EMI) – Canada – This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques", NMB-003 édictée par le ministre des Communications.

If you have purchased this product under a United States Government contract, it shall be subject to restrictions as set forth in subparagraph (c)(1)(ii) of Defense Federal Acquisitions Regulations (DFARs) Section 252.227-7013 for Department of Defense contracts, and as set forth in Federal Acquisitions Regulations (FARs) Section 52.227-19 for civilian agency contracts or any successor regulations. If further government regulations apply, it is your responsibility to ensure compliance with such regulations.

Safety Information and Terms & Conditions

Safety and Notices

In This Section

- Important Notice
- Safety and Hazards

This section outlines important liability and safety guidelines concerning your new PCS Connection Card™.

Important Notice

Because of the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices such as the PCS Connection Card - CF2031 CDMA modem are used in a normal manner with a well-constructed network, they should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. SPRINT SPECTRUM L.P. accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using the PCS Connection Card - CF2031 CDMA modem, or for failure of the PCS Connection Card - CF2031 to transmit or receive such data.

Safety and Hazards

Do not operate the PCS Connection Card -CF2031 in areas where blasting is in progress, where explosive atmospheres may be present, near medical equipment, life support equipment, or any equipment which may be susceptible to any form of radio interference. In such areas, the PCS Connection Card - CF2031 **MUST BE POWERED OFF**. It can transmit signals that could interfere with this equipment.

Do not operate the PCS Connection Card - CF2031 in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, the PCS Connection Card - CF2031 **MUST BE POWERED OFF**. When operating, it can transmit signals that could interfere with various onboard systems.

The driver or operator of any vehicle should not operate the PCS Connection Card - CF2031 while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some jurisdictions, operating such communications devices while in control of a vehicle is an offense.

Terms and Conditions

In This Section

- Terms and Conditions of Services

This section contains the terms and conditions of service for your new PCS Connection Card™.

Terms and Conditions

Terms and Conditions of Services

(Effective as of November 24, 2003 until replaced)

Thanks for choosing Sprint. These terms and conditions are part of your agreement with Sprint for PCS Services.

The terms and conditions included with your PCS Phone may not be the most current version. For the most current version of the terms and conditions, please visit our website at www.sprintpcs.com or call PCS Customer Service Solutions at 1-888-211-4PCS. If you activated PCS Services before the effective date of these terms and conditions, these terms and conditions replace and supersede any previous terms and conditions.

If you have questions about your PCS Services, please visit our website at www.sprintpcs.com or call PCS Customer Service Solutions at 1-888-211-4PCS (4727).

Para solicitar esta literatura en español, por favor contactar a 1-888-211-4PCS(4727).

Agreement. Your agreement ("Agreement") with Sprint Spectrum L.P. and any of its affiliates doing business as Sprint providing PCS Services ("Services") to you is made up of these Terms and Conditions of Service ("Terms") and the Service Plan that we agree to provide you. Your "Service Plan" is described in our marketing materials, and includes the terms, rates and features we set for that Service Plan. In the agreement, we use the words "we," "us," "our" or "Sprint" to refer to Sprint Spectrum L.P. and its affiliates doing business as Sprint. You accept the agreement when you activate PCS Services or make any attempt to use our PCS Services (for example, attempting to place any call while on or roaming off the Sprint Nationwide PCS Network, using data services, etc.). We may change the Agreement at any time by giving you prior notice. Any changes to the Agreement are effective when we publish them. If you use our Services or make any payment to us on or after the effective date of the changes, you accept the changes. If we change a material term of the Agreement and that change has a material adverse effect on you, you may terminate the Agreement without an early termination fee by calling 1-888-211-4727 within 30 days after the invoice date of the first invoice your receive after the changes go into effect. You understand and agree that taxes, Universal Service fees and other charges imposed by the government or based on government calculations may increase or decrease on a monthly basis, and that this paragraph does not apply to any increases in such taxes, Universal Service fees and other charges.

Provision of Service. Your purchase of a PCS Phone or other equipment does not mean that we must provide Services to you. We may decide not to provide Services to you for any lawful reason. We may request that you provide us with any information we reasonably require to determine whether you qualify for Services. Services in some areas are managed and provided under contract with Sprint by independent affiliates with access to the Sprint Nationwide PCS Network. Some

Services may not be available or may operate differently in certain affiliate markets or other areas.

Credit Verification. You must have and maintain satisfactory credit to receive and continue to receive Services. We will verify your credit before agreeing to provide Services to you and we may verify your credit at any time while we provide Services to you. Credit verification may include a review of credit reports that we receive from credit bureaus. If at any time we determine, in our sole discretion, that payment for Services may not be made when due, we may suspend Services and require that you provide payment on account or a guarantee of payment before we resume Services.

Service Plan. You may be eligible for a fixed length PCS Service Plan ("Term Service Plan") or for a month-to-month Service Plan ("Non-Term Service Plan"). We determine the Service Plan for which you qualify. Except as permitted by the Agreement, you must maintain service with us on your Term Service Plan for the minimum term associated with that Term Service Plan. We may offer non-identical Service Plans to different individuals or entities. Services and coverage under some Service Plans may be more limited than available under other Service Plans. Your Service Plan sets out the charges for Services and is your Service Plan until that Service Plan is changed, you switch to a different Service Plan, or your Services terminate. Based on your credit rating or other factors, we may require that you make a deposit, prepayment, or a series of deposits or prepayments, or be subject to an account spending limit, before Services are activated or maintained.

Changing Service Plans. If you are on a Non-Term Service Plan, you may change to a different Service Plan for which you qualify. Any change is effective at the start of your next full invoicing cycle unless otherwise specified by us at the time that you place your change order. If you change or add a different Service Plan or service feature and the change is effective prior to the start of your next full invoicing cycle, you will be invoiced a prorated amount. We may require a service charge for implementing any change directed by you in addition to the charges associated with the Service Plan or optional service features you select. If you are on a Term Service Plan and you want to change your service plan, you may be required to accept a new Term Service Plan and we may require you to pay the early termination fee set out in your Service Plan or other fee.

Termination. Non-Term Service Plan. If you are on a Non-Term Service Plan, you may terminate Services at any time by giving us notice. Subject to the terms of this Agreement, we may terminate Services at any time, with or without notice. If your Service has been suspended due to non-payment, you may be charged a reactivation fee. We may deactivate any Number before you receive notice of termination without liability to you. Termination by either of us may be with or without cause.

Termination. Term Service Plan. EXCEPT AS PERMITTED BY THE AGREEMENT, IF YOU TERMINATE YOUR TERM SERVICE PLAN BEFORE THE END OF THE TERM, OR IF WE TERMINATE SERVICES FOR CAUSE BEFORE THE END OF THE TERM, YOU WILL BE REQUIRED TO PAY THE EARLY TERMINATION FEE ASSOCIATED WITH YOUR TERM SERVICE PLAN. No early termination fee is charged if you

terminate a Term Service Plan in accordance with the return policy associated with your Term Service Plan. After the expiration of the term, the Terms relating to Non-Term Service Plans apply.

Termination. General. Regardless of whether you have a Non-Term or a Term Service Plan, we may terminate or suspend Services to you without liability if: (1) you breach any provision of this Agreement (including if you fail to pay any charges for Services); or (2) you fail to pay any charges due us for equipment or otherwise. If Services are terminated before the end of your current invoicing cycle, we will not prorate the monthly recurring charge to the date of termination, and you will not receive a credit or refund for any unused minutes in your Service Plan.

Use of Services and Equipment; Availability. You must be at least 18 years old to subscribe to our Services. We may require you to provide proof of your age and identity. If you are under 18 years old you may be eligible for certain Services that have Account Spending Limits if a person 18 years or older is also named as a subscriber on the Account. Your PCS Phone will not accept the services of any wireless provider other than Sprint (but see Roaming). Services and equipment may not be used for any unlawful, fraudulent or abusive purpose. By requesting Services, you agree that you will not use Services and equipment in any unlawful, fraudulent or abusive manner. You may not resell or lease Services or equipment to anyone.

Coverage. Most services are only available within the operating range of the Sprint Nationwide PCS Network (also see Roaming). Coverage is not available everywhere. Coverage and quality of Services may be affected by conditions within or beyond our control, including network problems, signal strength, your equipment, and atmospheric, geographic, or topographic conditions. We do not guarantee service availability or that there will be no interruptions or delays in Services (e.g., dropped calls, blocked calls, etc.).

Number. We may change the phone number ("Number") assigned to your PCS device without compensation by giving you prior notice. You do not own the Number. You may not modify the Number we program into any phone or other equipment, duplicate the Number to any device other than that authorized by us or, except as allowed for by law, transfer (port) the Number to any other individual or entity. If you transfer the Number to another carrier, the terms of the Agreement (including the rights and obligations set forth in the Termination paragraphs) still apply. In certain instances, you may transfer a Number from another carrier to Sprint. Sprint does not in any way guarantee that such transfers to (or from) Sprint will be successful. If a transfer to Sprint is not successful, you will be responsible any discounts provided to you with the purchase of your PCS device. See our printed in-store materials or visit www.sprintpcs.com for additional important information on Number transfers.

Phone Activation Fee. You may be required to pay a non-refundable phone activation fee when you activate a new Number, have us switch a Number to a different phone, have your current Number changed, we activate a different phone on your existing account or your Service Plan says so.

Charges. For most forms of wireless Service, your usage will be charged from the time you first initiate contact between your phone or other wireless device and the network until the network connection is broken, whether or not you are successful in connecting with the service with which you seek to connect, even if the connection is later broken or dropped. An exception is that you are not charged for voice calls that are not completed. You are charged for completed calls to your Number from the time shortly before the phone starts ringing until the call is terminated. You will be charged peak rates for the entire duration of calls initiated during the peak time periods applicable to your Service. You will be charged off-peak rates for the entire duration of calls initiated during the off-peak time periods applicable to your Service. In addition to these usage charges, you may be charged for recurring monthly service charges, applicable local and long-distance toll charges, other usage charges, (including voicemail access, call waiting, call forwarding, etc.), connection fees, roaming charges, directory assistance, call completion charges, account review and management charges, optional features you select at an extra cost, surcharges related to government programs, and taxes. Charges for most Services are incurred in one-minute increments, with partial minutes of use rounded up to the next highest minute. You must pay, by each invoice due date, all charges for Services provided to the Number for each phone or other equipment that our records show you activated, no matter who actually uses or has possession of the phone or other equipment at the time Services are provided.

PCS Vision (Third Generation) Wireless Charges. For PCS Vision wireless services, you will be charged on a per kilobyte basis for data used, rather than for airtime used. As long as your PCS Vision device is connected to the Sprint Nationwide PCS Network ("PCS Vision network"), you will be incurring data usage charges. You are responsible for all data activity from and directed to your PCS Phone, regardless of who initiates the activity. We will invoice you for all data directed to the internet address (or "IP address") assigned to your device in a given PCS Vision session, regardless of whether your device actually receives the data. You will be charged for data usage initiated by others as well as those you initiate. You will be charged for additional data used in transporting and routing on the network. You will be charged for partial and interrupted data downloads or other use, including re-sent data, and for unsuccessful attempts to reach websites and use other applications and services, including those resulting from dropped network connections. If you use a Premium Service (including services provided by third parties but for which you are billed on your PCS Invoice), you will be charged for data used in transport and routing in addition to the charge for the Premium Service. The amount of data used and charged to you will vary widely, depending upon the specific PCS Vision wireless application or other service you use, the amount of data used in the specific application or service, and network congestion and other matters. For this and other reasons, estimates of data usage - for example, the size of downloadable files - will vary from what you actually use. You cannot receive incoming calls while using third generation services. Data usage will be rounded up to the next whole kilobyte. Kilobyte usage will be rounded up to the next full cent. Rounding up will occur at the end of each separate session or each clock hour (at the top of

each hour), if the session spans more than 1 clock hour. When traveling on our PCS Vision network, a session may be ended and new session initiated, although no interruption to the actual data session will occur. Your invoice will not separately identify the number of kilobytes attributable to your use of specific sites, sessions or services used.

PCS Vision Premium Services. Your PCS Vision wireless services may allow you to access or download premium content for an additional charge. Certain PCS Vision services (e.g., games, ringers and screen savers) primarily contain premium services content. Access to and downloading of premium content is not included with PCS Vision services. The additional charges for this premium content will be billed to you on your PCS Invoice. You will be charged for this content (at rates and charges specified at the time of access or download) that will be in addition to data usage charges you will incur while connected to the enhanced PCS Vision network. We provide no warranties and make no representations or claims with regard to third-party Premium Services. In certain instances, subject to the terms of the content purchased, we may delete premium and non-premium items downloaded to available storage areas (e.g., your vault), including any pictures, games and other content. We may limit the amount of Premium Services you may purchase in a specific timeframe (month, week, day, or other time period). We may suspend your use of Premium Services without prior consent or notice if we have reason to suspect fraudulent or unauthorized use of your Premium Services account, but we make no assurances that we will suspend your account.

Other Terms Applicable to PCS Vision Usage. Use of PCS Vision wireless services requires the purchase of a separate third generation wireless compatible phone or other device and is subject to any software, memory, storage or other limitation in the phone or other equipment. Not all applications and services work, or work the same, on all third generation wireless phones and devices. Check the materials accompanying your phone or device to determine which applications and services it will support. PCS Vision wireless services are not available while off the PCS Vision network. PCS Vision services are not available for server devices or host computer applications, other systems that drive continuous heavy traffic or data sessions, or as substitutes for private lines or frame relay connections. Unlimited PCS Vision plans/options are only available with phones or PCS smart phones where the device is not being used as a modem in connection with other equipment (e.g., computers, PDAs, etc.) through use of connection kits or other phone-to-computer/PDA accessories, or Bluetooth or other wireless technology. Sprint reserves the right to deny or to terminate service without notice for any misuse. Sprint is not responsible for any opinions, advice, statements, services applications or other information provided by third parties and accessible through PCS Vision wireless services. Neither Sprint nor its vendors or licensors guarantees the accuracy, completeness or usefulness of information that is obtained through the PCS Vision wireless services. You are responsible for evaluating such content. Use of certain PCS Vision wireless services, including some messaging services, may result in the disclosure to others of your email address and other information about you in connection with your internet usage. Your accessing of, or use of, third party sites or services accessible PCS Vision wireless services may require the

disclosure of information about you, subject to the policies of those sites and services. You consent to receiving advertising, warnings, alerts and other messages, including broadcast messages. Your access to PCS Vision wireless services is controlled by a password.

Voice Command. PCS Voice Command is an optional service that allows you to place calls by using speech recognition technology. Calls to 911 or similar emergency numbers cannot be placed through the Voice Command feature. Airtime and applicable long distance charges for a call completed from your Number using the Voice Command feature begin when you press or activate the TALK or similar key(s) and end when your call is terminated by hitting the END key or by returning to the Voice Command platform. If you initiate and complete another call without leaving the Voice Command platform, a separate charge for that call will begin from the time the previous call was terminated. Airtime and applicable long distance charges will be applied to the entire length of a completed call initiated from Voice Command. Using Directory Assistance to input names into your Voice Command address book will incur additional charges.

Invoicing. Invoicing cycles are approximately 30 days in length. Invoicing cycles and dates may change from time to time. Except as otherwise provided in your Service Plan, monthly recurring charges (MRCs) are invoiced one invoicing cycle in advance. Charges for Services are usually invoiced as soon as possible after the charges accrue. We may, however, invoice you for usage and charges occurring before the invoicing cycle being invoiced, if they were not previously invoiced. If you are invoiced for usage incurred during a prior invoicing cycle, those minutes will be applied to your Service Plan minutes for the current invoicing cycle. However, if you change your PCS Service Plan between the time the usage was incurred and the beginning of the current invoicing cycle, those minutes from the prior invoicing cycle will be charged at the rate per minute for usage over included minutes provided in the Service Plan in effect at the time the usage was incurred.

Payment. If you have authorized payment for Services or equipment by credit card or by debiting a bank account, no additional notice or consent is required before we invoice the credit card or debit the bank account for all amounts due to us or billed by us on behalf of a third party. You must promptly notify us of any change in your invoicing address or of the credit card or bank account used for payment. We reserve the right to require payment by money order, cashier's check or other secured form of payment. If we take action to receive payment beyond invoicing you for charges for Services or equipment, you must pay our costs and expenses of collection, including attorneys' fees and expenses, the fees of any collection agency and court costs. If we act as an invoicing agent for a third-party service provider, payments received are first applied to amounts due and owing to us and any remaining amounts are applied to sums due and owing to the third-party service provider. We may immediately charge an additional fee for any check or other negotiable instrument endorsed by you and returned unpaid by a financial institution for any reason. You may be charged fees for certain methods of payment.

Late Payment Charges. Payment is past due if we do not receive it by the due date shown on your invoice. Any payment for Services and equipment not made when due accrues late charges until paid at the rate of 5% per month or at the highest rate allowed by law. Acceptance of late or partial payments (even if marked "paid in full") does not waive our right to collect all amounts that you owe us. If your Service has been suspended due to non-payment, you may be charged a reactivation fee.

Disputed Charges. You must raise any dispute that you have about any charges invoiced to you within 15 days of the date of the invoice or you have accepted the invoice. You may notify us of any dispute by notifying PCS Customer Service Solutions. Calls to our sales or general business offices are not notice of a dispute. If disputed invoice procedures are described on the invoice, you must follow them.

Account Spending Limit. If we agree to provide Services to you on an Account Spending Limit basis, we will tell you your Account Spending Limit before we start Services to your Number, or as reasonably practicable after the limit is imposed. If we require a deposit for you to establish or keep Services on an Account Spending Limit basis, we will hold the deposit as partial guarantee of payment for Services (see Deposits). Charges for Services accrue against your Account Spending Limit as they are incurred. We may charge an initial ASL start up fee. We may charge a monthly ASL service fee, in addition to your recurring monthly service charge. We may suspend Services to your Number without prior notice to you when your account balance reaches your Account Spending Limit. Services are restored when you have paid any past due balance and pay a specified minimum amount to reduce your account balance below your Account Spending Limit. We may change this minimum amount at any time upon notice to you. You may pay any past due balance and the minimum amount by any method authorized by Sprint. Contact PCS Customer Service Solutions for information about authorized methods of making these payments. We may charge you a fee for calls that involve our live customer care services. If we provide Services to you on an Account Spending Limit basis, Services and coverage may be limited in certain ways. You must pay all charges for Services even if they exceed the amount of your Account Spending Limit.

Clear Pay. If we agree to provide Services to you as a Clear Pay customer, we may suspend Services to your Number without prior notice to you immediately when your bill becomes past due. Even if your bill is not past due, we may suspend services if your unpaid usage exceeds $125 or another amount to be determined by your past credit or usage history. If we require a deposit for you to establish or keep Services as a Clear Pay customer, we will hold the deposit as partial guarantee of payment for Services (see Deposits, below). Contact PCS Customer Service Solutions for information about authorized methods of making these payments. We may charge you a fee for calls that involve our live customer care services. If we provide Services to you on as a Clear Pay basis, Services and coverage may be limited in certain ways. You must pay all charges for Services whether or not your Services are suspended or terminated.

Deposits. If we require a deposit for you to establish or keep Services, we will hold the deposit as partial guarantee of payment for Services. We may change the deposit amount at any time to reflect revised estimated monthly charges based upon your usage. A deposit may not be used to pay any invoice (unless it is used to pay a final invoice) or delay payment. The deposit amount, the length of time we hold the deposit and changes to the deposit amount are determined based on your credit and payment history. The rate of interest, if any, on the deposit is subject to change. We may mix deposits with our other funds. If Services are terminated for any reason, we may, without notice to you, apply your deposit toward payment of outstanding charges and return any excess to you at your last known address within 75 days after termination of Services. If the U.S. Postal Service cannot deliver the money to you and returns it to us, we will hold it for you for one year from the date of return and, during that period, we may charge a servicing fee against the deposit balance. Any money held during this one-year period will not accrue interest for your benefit. You forfeit any portion of the money left after the one-year period.

Wireless Web and Voice Portal Services. Wireless Web Services are part of the Services that can be obtained through Sprint. Wireless Web Services are not available in all markets or while roaming off the Sprint Nationwide PCS Network. Use of Wireless Web Services requires an Internet-ready PCS Phone or certain other equipment (or both) and is subject to any memory, storage or other limitation in the phone or other equipment. Wireless Web Services are not available on PCS Vision phones or devices. The Caller ID blocking feature is not available when using Wireless Web Services. Any use of Wireless Web Services deducts from your Service Plan minutes. For data calls (including Wireless Web and Voice Portal calls) that are attempted, but not completed, you are charged for the time during which the network attempts to connect the call. You are charged for time spent connected to the Wireless Web or Voice Portal, including time spent browsing on the Internet or Voice Portal and reviewing or scrolling through Internet information on-line while still connected to the Sprint Nationwide PCS Network. Not all Internet sites can be accessed and you may receive an error message if you attempt to access a site that cannot be accessed through Wireless Web Services. You are also charged for Wireless Web connections to review your PCS account information. Wireless Web Services are not available with all Service Plans. Sprint is not responsible for any opinions, advice, statements, services or other information provided by third-parties and accessible through Wireless Web Services or Voice Portal Services. Neither Sprint nor its vendors or licensors guarantees the accuracy, completeness or usefulness of information that is obtained through the Wireless Web Services or Voice Portal Services. You are responsible for evaluating such content.

Taxes and Surcharges. We invoice you for taxes, fees and other charges levied by or remitted directly to federal, state or local authorities, or foreign government on Services including, without limitation, sales, gross receipts, use, and excise taxes. If you claim any tax exemption, you must provide us with a valid tax-exempt document. Any tax exemption applies only from the date we receive a valid tax-exempt document. We also invoice you for fees that we collect and remit to the government such as Universal Service, and for surcharges that we collect and keep to pay for the costs of complying with government mandates such as number pooling and portability, and Enhanced 911 service. These charges are neither taxes nor government imposed assessments.

Roaming. Calls made while off the Sprint Nationwide PCS Network are "roaming" calls. Your PCS Phone is specifically designed and engineered to work only on the Sprint Nationwide PCS Network. It works on another CDMA PCS provider's system only when a roaming agreement is in place between Sprint and the other providers. If your PCS Phone is a dual-mode phone, it works on both a CDMA PCS provider's system (in addition to the Sprint Nationwide PCS Network) and a wireless analog telecommunications provider's system only when roaming agreements are in place between Sprint and the other providers. If we do not have a roaming agreement in place, you may be able to place roaming calls "manually" by using a valid credit card. If there is a gap or other interruption of coverage within a PCS coverage area that prevents connection with the Sprint Nationwide PCS Network and your dual-band phone is set to roam automatically when outside PCS coverage, you may incur roaming fees within a PCS coverage area. Certain features and services may not be available when roaming (including PCS Vision, voicemail, call waiting, call forwarding, etc.).

Phones and Other Equipment. Phones and other equipment may be purchased and returned as provided in the purchase documents. We are not the manufacturer of the phones or other equipment. The only warranties on the phones or other equipment are any limited warranties extended by the manufacturers. We have no liability in connection with the phones and other equipment or for the manufacturers' acts or omissions.

Lost or Stolen Equipment. If your phone or other equipment is lost or stolen, you must notify us by calling PCS Customer Service Solutions. You are responsible for all charges for Services provided to the Number for the lost or stolen equipment before you notify us of the loss or theft. We will deactivate Services to the Number upon notification to us of any loss or theft. You may be required to provide evidence of the loss or theft (for example, a police report or sworn statement). If the equipment is later found, we may require that you exchange it for another phone or other equipment before we reactivate Services (if we do reactivate Services), as well as require you to pay a reactivation fee. We will deactivate Services to any Number without prior notice to you if we suspect any unlawful or fraudulent use of the Number. You agree to cooperate reasonably with us in investigating suspected unlawful or fraudulent use.

Messages. You will incur airtime usage charges when accessing your voicemail from your PCS Phone. You may also incur charges in accessing text messages from your PCS Phone. You may access your voicemail without incurring airtime usage charges by checking your voicemail from a wireline phone. We may impose limits on the number of voicemail or text message that can be retained through your PCS account. Audible or visual indicators of text or voicemail messages, including mailbox icons on your PCS Phone, may not always provide an up to date indication of new messages. In certain instances, you may be required to manually reset or clear your mailbox indicator.

Caller ID. If you do not want people you call to receive the Number assigned to your phone, you must call PCS Customer Service Solutions for information about automatic Caller ID blocking. The Number assigned to your phone can be blocked on a per-call basis by dialing *67 + Destination Number + TALK (or similar key), but Caller ID delivery resumes on the next call you make. Caller ID display on incoming calls to your Number depends on receiving the information from the calling party.

TTY Access. A TTY (also known as TDD or Text Telephone) is a telecommunications device that allows people who are deaf or hard of hearing, or who have speech or language disabilities, to communicate by telephone. TTY doesn't work with all PCS Phones. If you have a PCS TTY-capable phone, it may not function effectively, or at all, when attempting 911 calls due to the equipment or software of the answering agency. Therefore, a TTY device should not be relied on for 911 calls.

Pay-Per-Call Service. We will not complete calls from your Number to 900, 976 and similar numbers for pay-per-call services.

International Calling. You may be limited in the international destinations that you can call with Services. You should contact
PCS Customer Service Solutions for information about international destinations that you cannot call.

Limitation of Liability. Except as otherwise provided in this section, our sole liability to you for any loss or damage arising out of providing or failing to provide Services (including mistakes, omissions, interruptions, delays, errors, or defects) does not exceed (1) in cases related to a specific piece of equipment, the prorated MRC for Services to the piece of equipment during the affected period, or (2) in cases not related to a specific piece of equipment, the prorated MRCs for Services to you during the affected period. Neither we nor our vendors, suppliers or licensors are liable for any damage arising out of or in connection with:

a) any act or omission of any telecommunications service or other service provider other than us;

b) any directory listing;

c) any dropped calls or inability to place or receive calls;

d) any interruption of Services, including interruptions caused by equipment or facilities failure or shortages, transmission limitations or system capacity limitations;

e) traffic or other accidents, or any health-related claims allegedly arising from the use of Services, phones, equipment or accessories used in connection with the Services;

f) the use of Wireless Web Services and PCS Vision applications and services, including the accuracy or reliability of any information obtained from the Internet using Wireless Web Services or from Voice Portal Services, PCS Vision wireless services or Internet services, content or applications not supported by Sprint PCS;

g) any late or failed message delivery;

h) any interruption or failure of 911 or E911 emergency services or identification of the Number, address or name associated with any person accessing or attempting to access emergency services from your phone;

i) the installation or repair of any products or equipment by parties who are not our authorized employees or agents;

j) events due to factors beyond our control, including acts of God (including, without limitation, weather-related phenomena, fire or earthquake), war, riot, strike, or orders of governmental authority;

k) any act or omission of any third party or independent contractor that offers products or services in conjunction with or through the Services; or

l) your negligent or intentional act or omission.

NO CONSEQUENTIAL OR OTHER DAMAGES. UNDER NO CIRCUMSTANCES ARE WE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR SPECIAL DAMAGES OF ANY NATURE WHATSOEVER ARISING OUT OF OR IN CONNECTION WITH PROVIDING OR FAILING TO PROVIDE SERVICES, PHONES OR OTHER EQUIPMENT USED IN CONNECTION WITH THE SERVICES, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, LOSS OF BUSINESS, OR COST OF REPLACEMENT PRODUCTS AND SERVICES. THIS SECTION SURVIVES TERMINATION OF THIS AGREEMENT.

Indemnification. You indemnify and defend us, our partners, directors, officers, employees and agents from and against any claim, action, damage, liability and expense arising out of or in connection with: (1) your acts or omissions that occur in connection with your use of the Services or equipment used in connection with the Services, and (2) any communications you make or receive using the Services. This indemnification extends to and includes any attorney's fees and costs incurred by us arising from any actions or claims to which this indemnification applies, or from the contesting of the applicability of this provision. This section survives termination of this Agreement.

MANDATORY ARBITRATION OF DISPUTES. ANY CLAIM, CONTROVERSY OR DISPUTE OF ANY KIND BETWEEN THE CUSTOMER AND THE COMPANY AND/OR ANY OF ITS EMPLOYEES, AGENTS, AFFILIATES OR OTHER REPRESENTATIVES, WHETHER SOUNDING IN CONTRACT, STATUTE, OR TORT, INCLUDING FRAUD, MISREPRESENTATION, FRAUDULENT INDUCEMENT, OR ANY OTHER LEGAL OR EQUITABLE THEORY AND REGARDLESS OF THE DATE OF ACCRUAL OF SUCH CLAIM, CONTROVERSY OR DISPUTE SHALL BE RESOLVED BY FINAL AND BINDING ARBITRATION AS PRESCRIBED IN THIS SECTION. THE FEDERAL ARBITRATION ACT, NOT STATE LAW, GOVERNS THE QUESTION OF WHETHER A CLAIM IS SUBJECT TO ARBITRATION. HOWEVER, NOTHING CONTAINED IN THIS ARBITRATION PROVISION SHALL PRECLUDE THE CUSTOMER FROM RESOLVING ANY CLAIM, CONTROVERSY OR DISPUTE IN SMALL CLAIMS COURT HE OR SHE OTHERWISE WOULD HAVE THE RIGHT TO PURSUE.

A single arbitrator engaged in the practice of law will conduct the arbitration. The arbitrator will be selected according to the rules of CPR or, alternatively, may be selected by agreement of the parties, who shall cooperate in good faith to select the arbitrator. The arbitration will be conducted by, and under the then-applicable rules of the CPR Institute for Dispute Resolution. All expedited procedures prescribed by the applicable rules will apply. Any required hearing fees and costs shall be paid by the parties as required by the applicable rules or as required by applicable law, but the arbitrator shall have the power to apportion such costs as the arbitrator deems appropriate. The arbitrator's decision and award will be final and binding (subject to the appeal clause below), and judgment on the award rendered by the arbitrator may be entered in any court with jurisdiction.

An appeal may be taken under the CPR Arbitration Appeal Procedure from any final award of any arbitral panel in any arbitration arising out of or related to this agreement that is conducted in accordance with the requirements of such Appeal Procedure. Unless otherwise agreed by the parties and the appeal tribunal, the appeal shall be conducted at the place of the original arbitration.

If any party files a judicial or administrative action asserting a claim that is subject to arbitration and another party successfully stays such action or compels arbitration, the party filing that action must pay the other party's costs and expenses incurred in seeking such stay or compelling arbitration, including attorney's fees.

Notices. You may get our current address for written notice by calling PCS Customer Service Solutions. Written notice to you is sent to your last known address in our invoicing records. Written notice is effective three days after deposit in the U.S. mail, postage prepaid, and properly addressed. Unless required by this Agreement or Applicable Laws, (1) you may notify us by calling PCS Customer Service Solutions, and (2) we may notify you by leaving a message for you on your PCS Phone, answering machine or with your answering service. Notice addresses may be changed by giving notice as provided in this section.

Choice of Law; Jurisdiction. This Agreement is governed by and must be construed under federal law and the laws of the State of Kansas, without regard to choice of law principles.

General. If either of us does not enforce any right or remedy available under this Agreement, that failure is not a waiver of the right or remedy for any other breach or failure by the other party. Our waiver of any requirement in any one instance is not a general waiver of that requirement and does not amend this Agreement. This Agreement is subject to any applicable federal and state law (collectively, "Applicable Laws"). If any part of this Agreement is held invalid or unenforceable, that part is interpreted consistent with Applicable Laws as nearly as possible to reflect the original intentions of the parties and the rest of this Agreement remains in full force and effect. Section headings are for descriptive purposes only and are not used to interpret this Agreement. You may not assign this Agreement to any other person or entity without our prior written approval. This Agreement (including any referenced documents and attachments) makes up the entire agreement between you and us and replaces all prior written or spoken agreements, representations, promises or understandings between you and us. The provisions of this Agreement that are contemplated to be enforceable after the termination of this Agreement survive termination of this Agreement. If there is a conflict, the Service Plan (including any Term Service Plan) controls over the Terms.

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